KUNZMAN ASSOCIATES, INC.

VVR, LLC COMMERCIAL PROJECT

TRAFFIC IMPACT ANALYSIS (REVISED)

July 7, 2016

Traffic Engineering | Transportation Planning | Parking | Noise/Vibration | Expert Witness
Air Quality | Global Climate Change | Health Risk Assessment

KUNZMAN ASSOCIATES, INC.

VVR, LLC COMMERCIAL PROJECT

TRAFFIC IMPACT ANALYSIS (REVISED)

July 7, 2016

Prepared by:

Perrie Ilercil, P.E.
Carl Ballard, LEED GA
William Kunzman, P.E.

1111 Town & Country Road, Suite 34
Orange, California 92868
(714) 973-8383

www.traffic-engineer.com

JN 5868a

TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

LIST OF FIGURES

I. INTRODUCTION

The purpose of this report is to provide an assessment of the traffic impacts resulting from the proposed VVR, LLC project, and to identify the traffic mitigation measures necessary to maintain the established Level of Service standard for the elements of the impacted roadway system. The traffic issues related to the proposed land uses and development have been evaluated in the context of the California Environmental Quality Act.

The County of San Bernardino is the lead agency responsible for preparation of the traffic impact analysis, in accordance with the California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated initial opening date with partial occupancy in Year 2017, final opening date with full occupancy of the development in Year 2024, at which time it will be generating trips at its full potential, and for the Horizon Year (2035).

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

A. Project Description

The proposed site is at the southwest corner of Phelan Road and Valle Vista Road in the County of San Bernardino. A vicinity map showing the project location is provided on Figure 1.

The project site is proposed to be developed with a commercial shopping center with 9 buildings totaling 77,817 square feet for multi-tenant restaurant, service station and retail on a vacant 10 acre parcel currently zoned as general commercial. Figure 2 illustrates the project site plan.

B. Study Area

Regional access to the project site is provided by the SR-138 and the I-15 Freeway. Local access is provided by various roadways in the vicinity of the site. The north-south roadways which will be most affected by the project include Beekley Road, Clovis Road, Sheep Creek Road, Valle Vista Road, and Johnson Road. The east-west roadways which will be most affected by the project include Phelan Road, and Nielson Road.

A series of scoping discussions were conducted with the following agency to define the desired analysis locations (see Appendix B):

- County of San Bernardino

In addition, the San Bernardino Transportation Analysis Model (SBTAM) has been obtained through discussions with the Southern California Association of Governments (SCAG) staff for purposes of this analysis for associated travel patterns.

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (Opening Year or Horizon Year) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does contribute trips greater than the arterial link threshold volume of 50 two-way trips in the morning and evening peak hours in the County of San Bernardino.

C. Phasing and Timing

The project is proposed to be constructed in seven phases (see Figure 3). Each phase has between 3,960 to 24,770 square feet of retail space. The construction schedule for each of the phases has not been determined at this time. For the purposes of this analysis the phases are assumed to be constructed individually (one per year). The opening year of Phase 1 is 2017 and the opening year of Phase 7 is 2024. Existing Plus Project will exemplify the existing traffic conditions with the entire site built out.

D. Analysis Methodology

The analysis of the traffic impacts from the proposed development and the assessment of the required mitigation measures were based on an evaluation of the existing and forecast traffic conditions in the vicinity of the site with and without the project. The following analysis years are considered in this report:

- Existing Conditions (2014)
- Existing Plus Project Conditions[1]
- Opening Year Conditions (2017) Phase 1
- Opening Year Conditions (2018) Phase 2
- Opening Year Conditions (2019) Phase 3
- Opening Year Conditions (2020) Phase 4
- Opening Year Conditions (2021) Phase 5
- Opening Year Conditions (2022) Phase 6
- Opening Year Conditions (2023) Phase 7
- Opening Year Conditions (2024) Phase 8
- Horizon Year Conditions (2035)

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. in December 2014 (see Appendix

[1] The existing plus project conditions has been analyzed to comply with the Sunnyvale West Neighborhood Association v. City of Sunnyvale CEQA court case. This scenario assumes the full development of the proposed project and full absorption of the proposed project trips on the circulation system at the present time.

C). In addition, truck classification counts were conducted at the study area intersections. The existing percent of trucks were used in the conversion of trucks to Passenger Car Equivalent's.

Project traffic volumes for all future projections were estimated using the manual approach. Trip generation has been estimated based on the Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012.

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site and other additional information were reviewed, including a San Bernardino Transportation Analysis Model select zone distribution for the project site.

The average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix D). Traffic model plots are included in Appendix E. This difference defines the growth in traffic over the 27 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2014 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2014 and Year 2035 is 21 years of the 27 year time frame, a factor of 0.78 (i.e., 21/27) was used.

The Horizon Year (2035) without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 peak hour volumes. The growth increment calculation worksheets are shown in Appendix D. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Potential other developments within the study area are included in the analysis if they are not currently built, they are approved, their approval has not expired, and they would contribute trips to the study area intersections. These developments are to provide a comprehensive analysis for growth augmentation of the San Bernardino Transportation Analysis Model data.

The Opening Year traffic volumes for each phase have been interpolated from the Horizon Year (2035) traffic volumes based upon a portion of the future growth increment.

Project traffic volumes were then added to the San Bernardino Transportation Analysis Model traffic volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F) based on the Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the level of service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue.

The Level of Service analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings has also been considered in the signalized intersection analysis. The following formula has been used to calculate the pedestrian minimum times for all Highway Capacity Manual runs:

[(Curb to curb distance) / (3.5 feet/second)] + 7 seconds.

For Existing/Existing Plus Project/Opening Year traffic conditions, saturation flow rates of 1,800 vehicles per hour of green for through and right turn lanes and 1,700 vehicles per lane for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the capacity analysis.

For Horizon Year (2035) traffic conditions, saturation flow rates of 1,900 vehicles per hour of green for through and right turn lanes and 1,800 vehicles per lane for single left turn lanes, 1,700 vehicles per lane for dual left turn lanes and 1,800 vehicles per lane for double right turn lanes have been assumed for the capacity analysis.

The peak hour traffic volumes have been adjusted to peak 15 minute volumes for analysis purposes using the existing observed peak 15 minute to peak hour factors for all scenarios analyzed. The Horizon Year (2035) peak hour factor has been adjusted upwards to 0.95. This is to account for the effects of congestion on peak spreading. Peak spreading refers to the tendency of traffic to spread more evenly across time as congestion increases.

The traffic mitigation needs anticipated at the time of the project opening with full occupancy and for the Horizon Year (2035) were combined into a summary of mitigation requirements and costs. The mitigation cost responsibility for the proposed development was estimated based on the percent of the increase in traffic from the existing condition to the Horizon Year (2035) that was attributed to the project-generated traffic.

E. Definition of Deficiency and Significant Impact

The following definitions of deficiencies and significant impacts have been developed in accordance with the County of San Bernardino requirements.

1. Definition of Deficiency

The definition of an intersection deficiency has been obtained from the County of San Bernardino General Plan. The General Plan states that peak hour intersection operations of Level of Service C or better are generally acceptable in the Desert Region of the County. Therefore, any intersection operating at Level of Service D or worse will be considered deficient.

For freeway facilities, the Congestion Management Program controls the definition of deficiency for purposes of this study. The Congestion Management Program definition of deficiency is based on maintaining a Level of Service standard of Level of Service E or better, except where an existing Level of Service F condition is identified in the Congestion Management Program document (San Bernardino County Congestion Management Program Table 2-1). A Congestion Management Program deficiency is, therefore, defined as any freeway segment operating or projected to operate at Level of Service F, unless the segment is identified explicitly in the Congestion Management Program document.

The identification of a Congestion Management Program deficiency requires further analysis in satisfaction of Congestion Management Program requirements, including:

- Evaluation of the mitigation measures required to restore traffic operations to an acceptable level with respect to Congestion Management Program Level of Service standards.

- Calculation of the project share of new traffic on the impacted Congestion Management Program facility during peak hours of traffic.

- Estimation of the cost required to implement the improvements required to restore traffic operations to an acceptable Level of Service as described above.

This study incorporates each of these aspects for all locations where a Congestion Management Program deficiency is identified.

2. Definition of Significant Impact

The identification of significant impacts is a requirement of California Environmental Quality Act. The County of San Bernardino General Plan and Circulation Element have been adopted in accordance with California Environmental Quality Act requirements, and any roadway improvements within the County of San Bernardino that are consistent with these documents are not considered a significant impact, so long as the project contributes its “fair share” funding or pro-rata contributions to the local transportation fee program for improvements.

This area of Phelan is currently not included in the Nexus improvements listing and improvements in this area are not eligible for Nexus transportation fee credits.

For intersections which have Level of Service D or better prior to the project, a traffic impact is considered significant if the project traffic contribution changes the Level of Service at any off-site location from D or better to E or worse. Level of service D may be maintained during interim improvements for Intersections, which currently have level of service D; however, level of service C or better will be provided with final improvements or pro-rata contributions for Year 2035 local transportation plan improvements and future signals.

For intersections which have Level of Service E or worse prior to the project, a traffic impact is considered significant if the project traffic contribution adds 10 or more trips in any approach or the intersection meets the peak hour traffic signal warrants after the addition of project traffic contribution.

Figure 1
Project Location Map

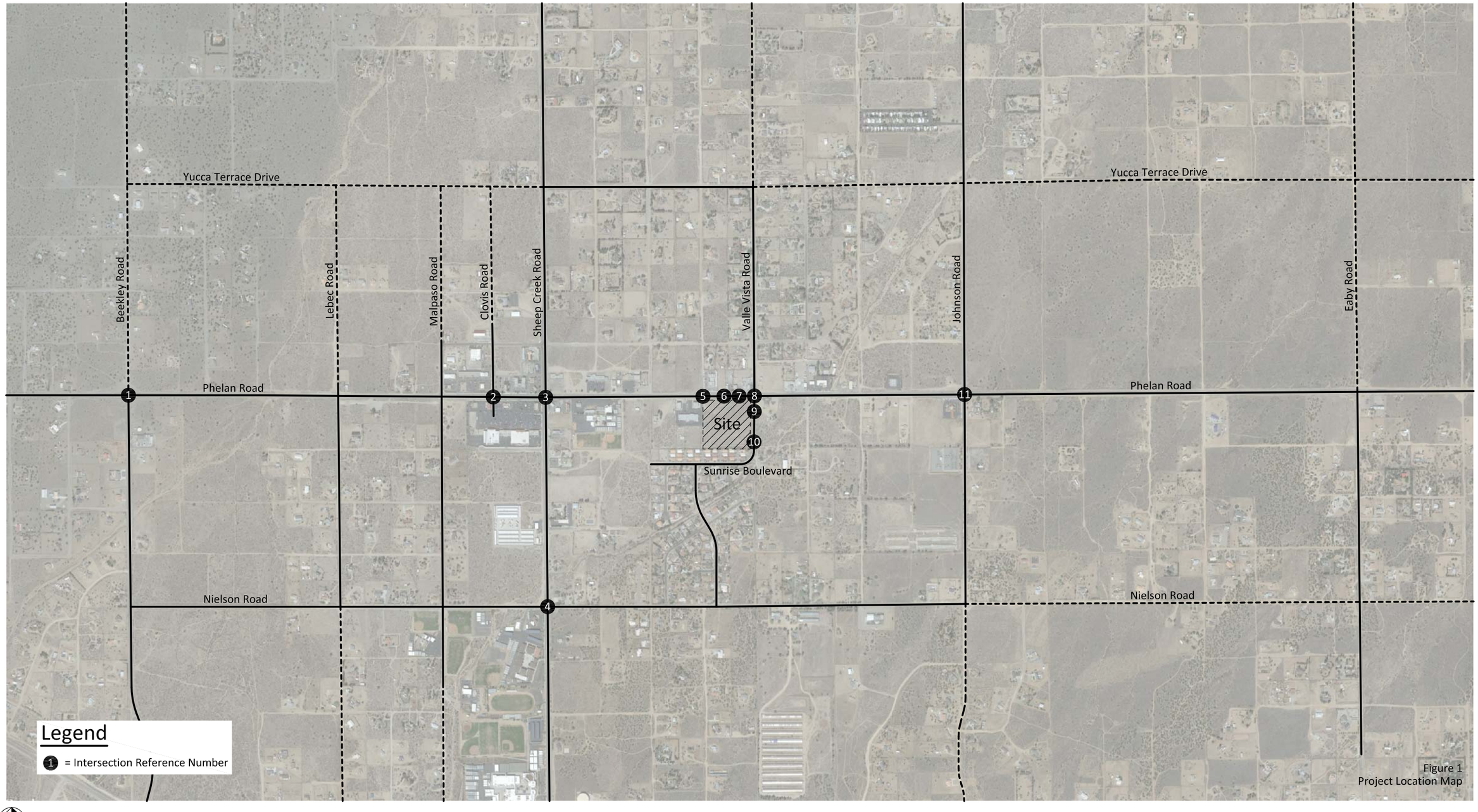


Figure 2
Site Plan

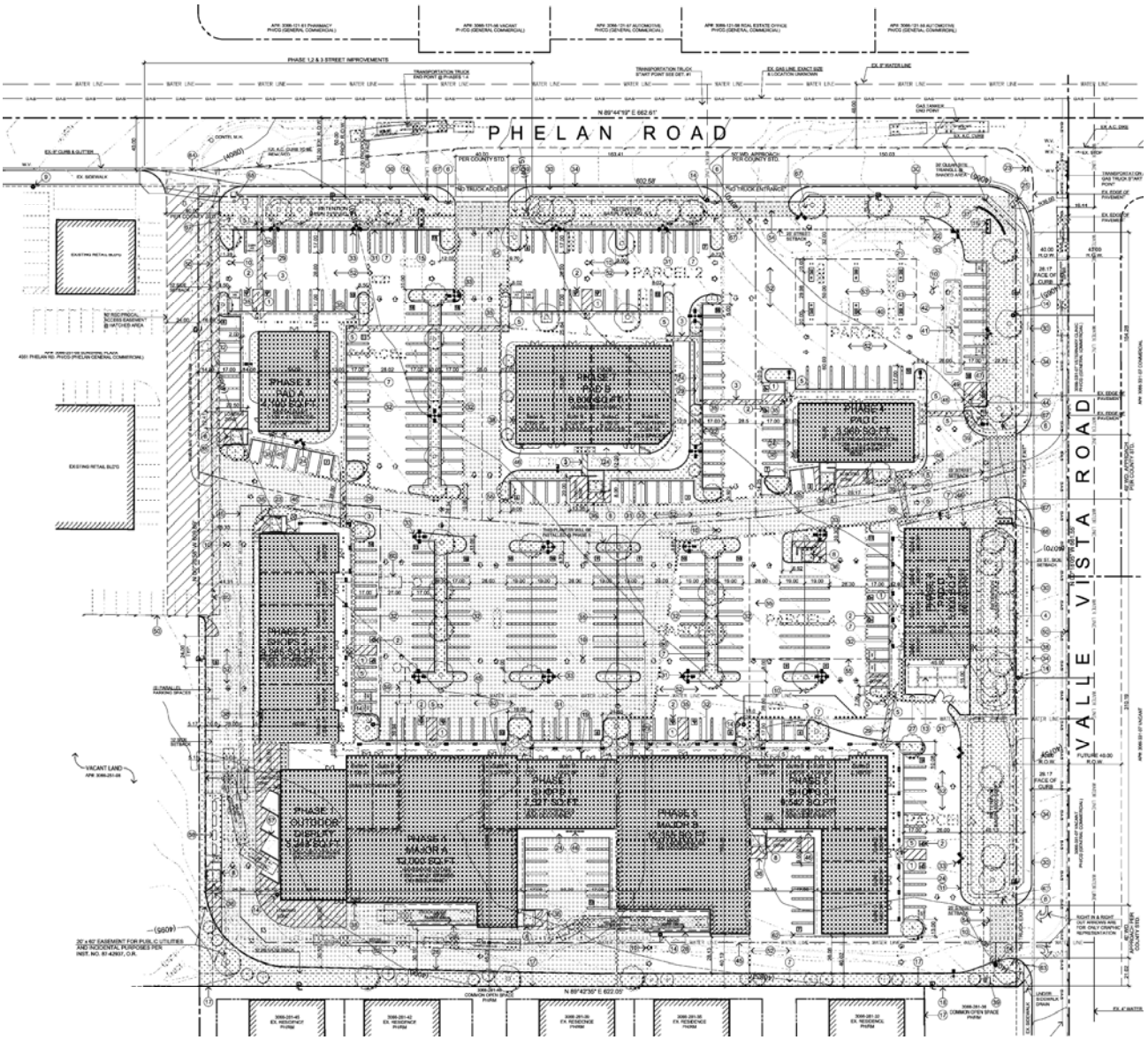
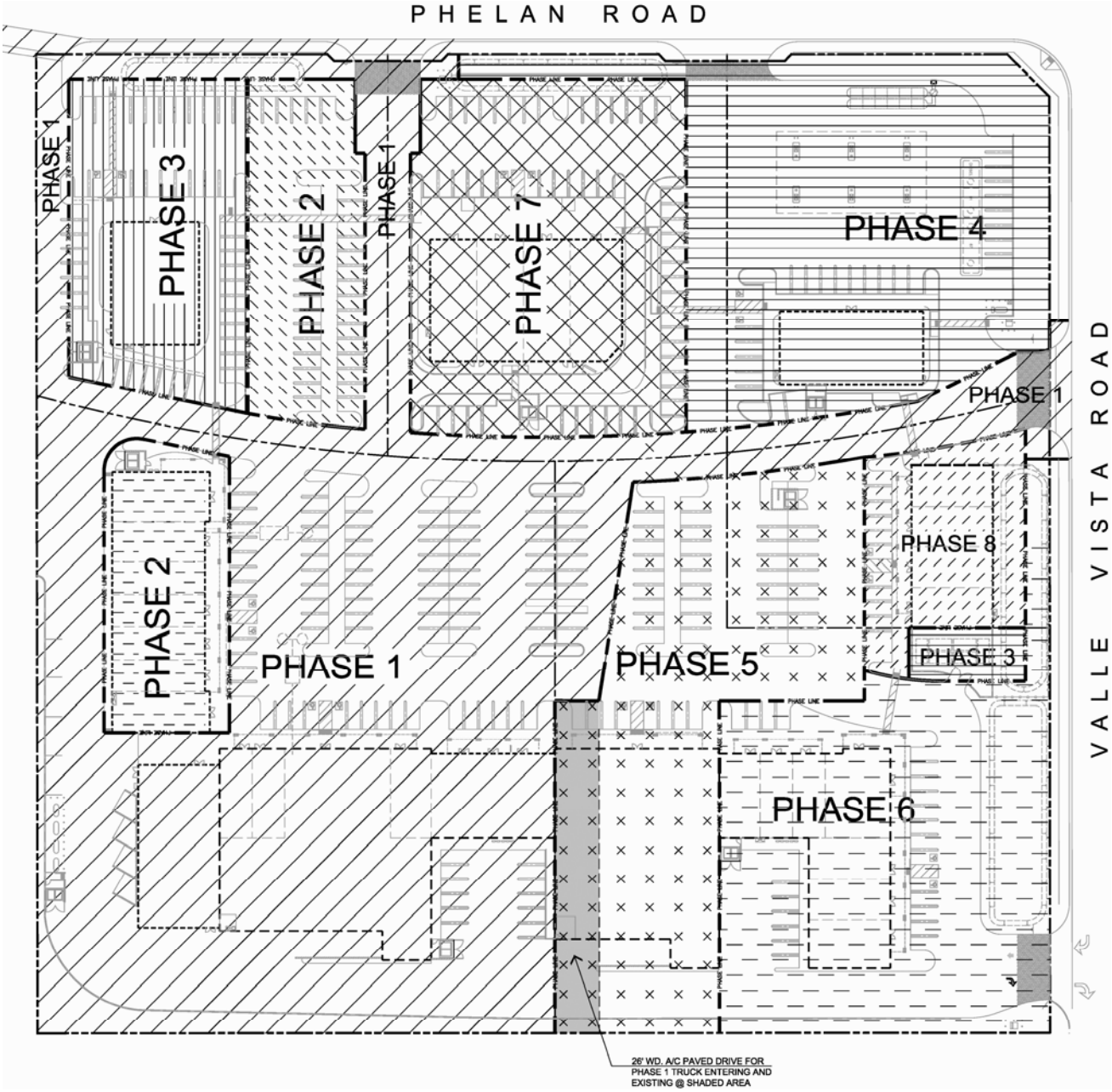


Figure 3
Project Phasing Diagram



II. EXISTING CONDITIONS

A. Existing Roadway System

Figure 4 identifies the existing conditions for study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

Regional access to the project site is provided by SR-138 and the I-15 Freeway. Local access is provided by various roadways in the vicinity of the site. The north-south roadways which will be most affected by the project includes Sheep Creek Road, Valle Vista Road and Johnson Road. The east-west roadways which will be most affected by the project include Yucca Terrace Drive, Phelan Road, and Nielson Road.

B. Existing Volumes

Figure 5 depicts the Existing average daily traffic volumes. The Existing average daily traffic volumes were factored from peak hour counts (see Appendix C) obtained by Kunzman Associates, Inc. using the following formula for each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 11.5 = Daily Leg Volume.

This is a conservative estimate and may overestimate the average daily traffic volumes.

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates from December 2014 (see Appendix C) and shown on Figures 6 and 7, respectively. Explicit peak hour factors have been calculated using the data collected for this effort as well. The morning and evening peak hour traffic volumes were identified by counting the two hour periods from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM.

In addition, truck classification counts were conducted at the study area intersections. The existing percent of trucks were used in the conversion of trucks to Passenger Car Equivalent's (see Appendix D).

C. Existing Level of Service

The Existing delay and Level of Service for intersections in the vicinity of the project are shown in Table 1. For Existing traffic conditions, the study area intersections currently operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that currently operate at Level of Service D[2] or worse during the peak hours:

[2] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

Existing delay worksheets are provided in Appendix F.

D. Existing Traffic Signal Warrant Analysis

A traffic signal appears to be currently warranted at the following study area intersection for Existing traffic conditions (see Appendix G):

Clovis Road (NS) at:
Phelan Road (EW) - #2

The unsignalized intersection has been evaluated for a traffic signal using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California Manual of Uniform Traffic Control Devices (November 2014).

E. Planned Transportation Improvements and Relationship to General Plan

The County of San Bernardino General Plan Circulation Element is shown on Figure 8. Existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 8. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The County of San Bernardino General Plan roadway cross-sections are shown on Figure 9.

Table 1

Existing Intersection Delay and Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	11.6-B	10.1-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	16.5-C	29.2-D
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	13.7-B	19.8-C
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	28.0-C	27.6-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.8-A	7.9-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	0	0	0	1	0	1[4]	1	0	19.5-C	17.8-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County	CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	18.6-C	25.6-D
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.6-C	24.3-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Figure 4
Existing Through Travel Lanes and Intersection Controls

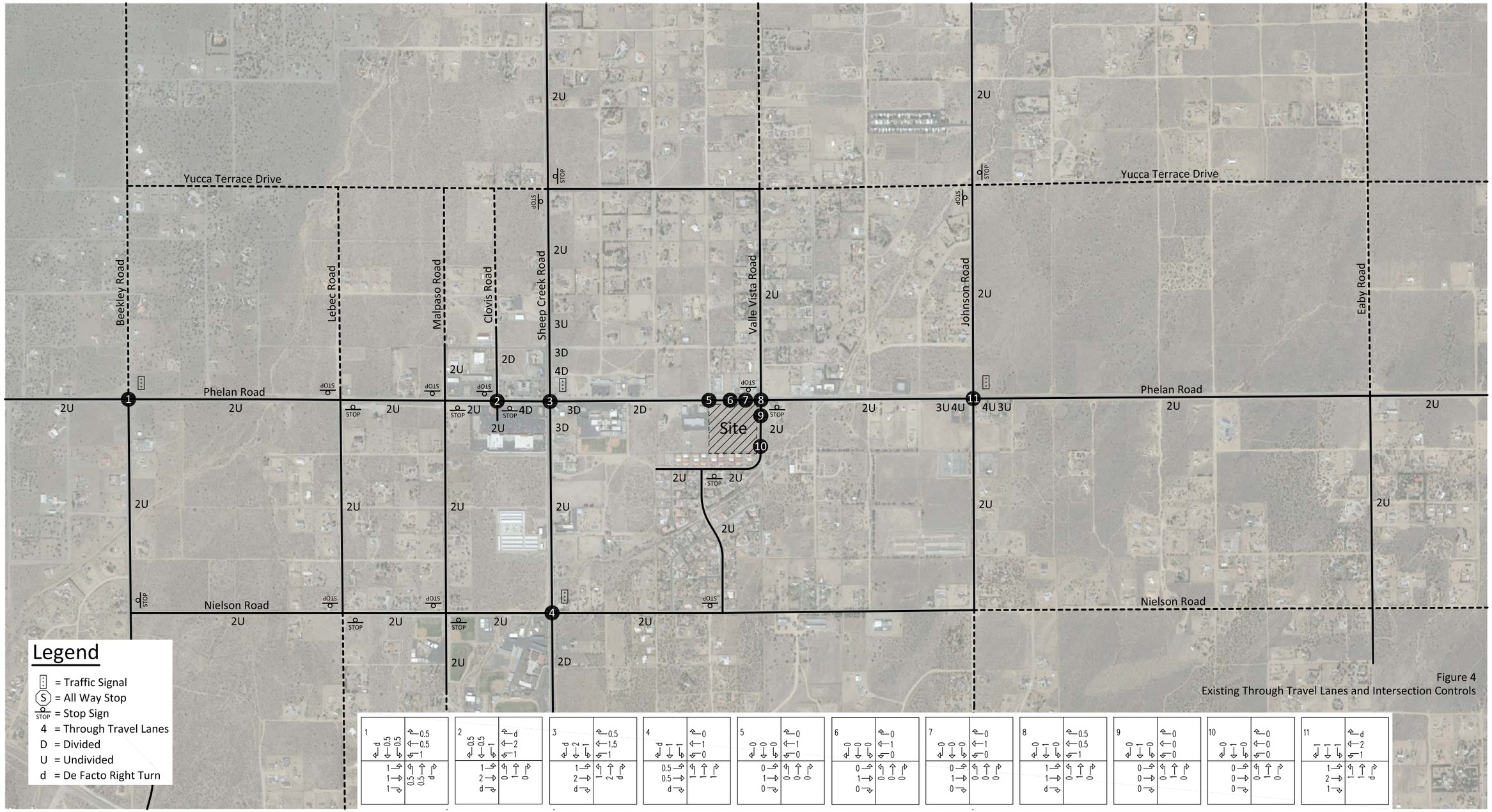


Figure 4
Existing Through Travel Lanes and Intersection Controls

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 5
Existing Average Daily Traffic Volumes

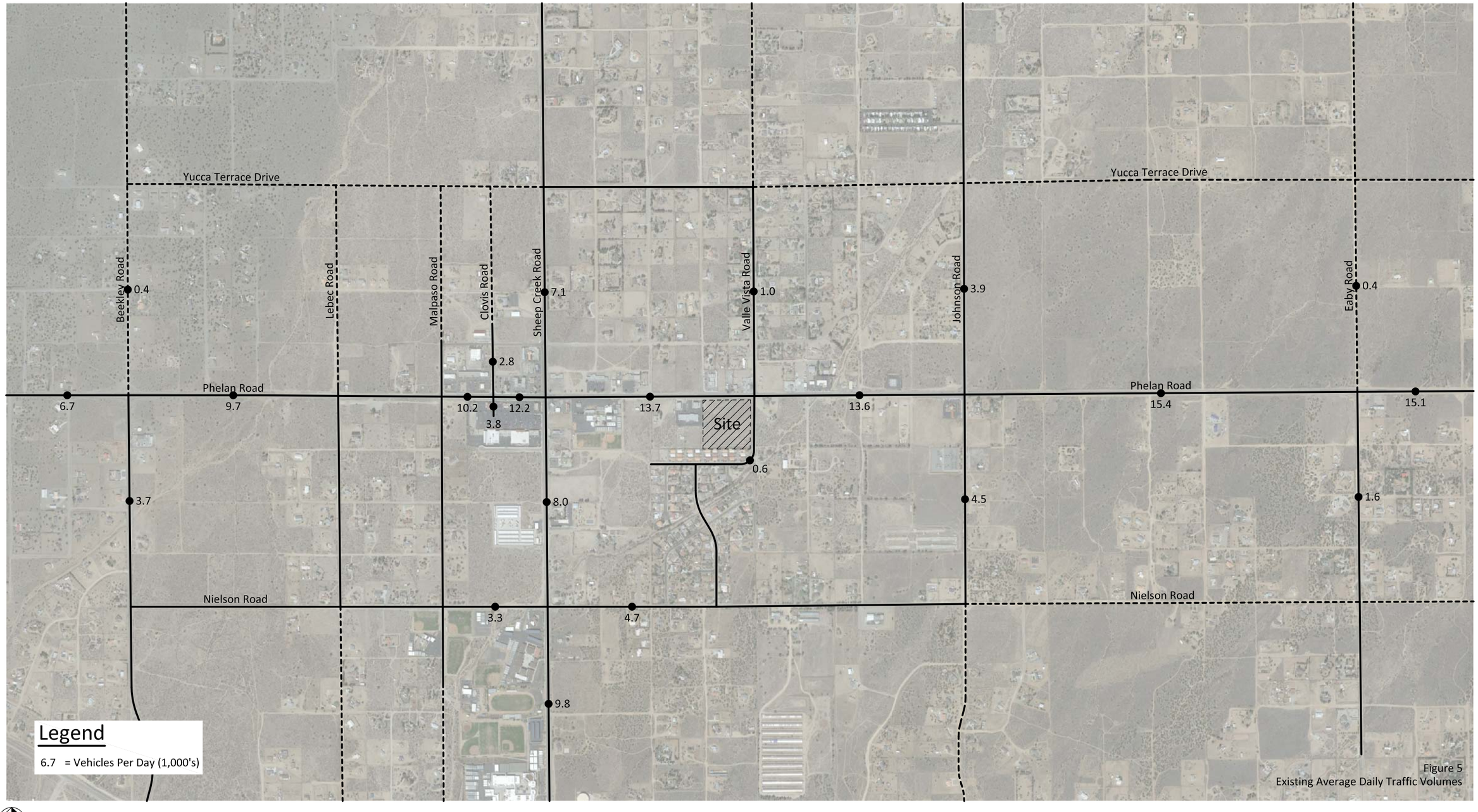


Figure 6
Existing Morning Peak Hour Intersection Turning Movement Volumes

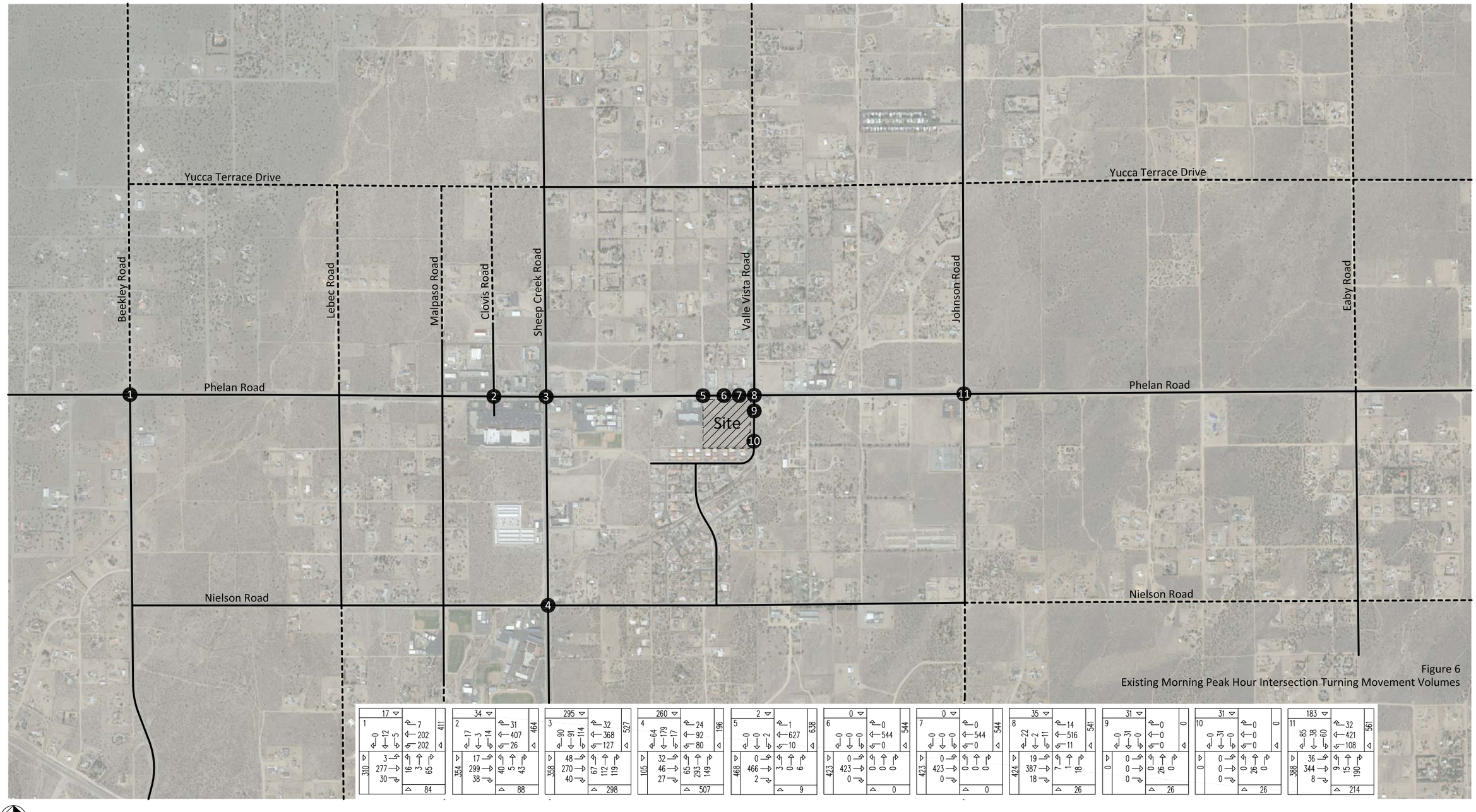


Figure 6
Existing Morning Peak Hour Intersection Turning Movement Volumes

17	34	295	260	2	0	0	35	31	31	183
1	2	3	4	5	6	7	8	9	10	11
0 ← 12 ← 5	17 ← 3 ← 14	90 ← 91 ← 114	64 ← 179 ← 17	0 ← 0 ← 2	0 ← 0 ← 0	0 ← 0 ← 0	22 ← 2 ← 11	0 ← 31 ← 0	0 ← 31 ← 0	85 ← 38 ← 60
7 ← 202 ← 202	31 ← 407 ← 26	32 ← 368 ← 127	24 ← 92 ← 80	1 ← 627 ← 10	0 ← 544 ← 0	0 ← 544 ← 0	14 ← 516 ← 11	0 ← 0 ← 0	0 ← 0 ← 0	32 ← 421 ← 108
411	464	527	196	638	544	544	541	0	0	561
310	354	358	105	468	423	423	424	0	0	388
3 → 277 → 30	17 → 299 → 38	48 → 270 → 40	32 → 46 → 27	0 → 466 → 2	0 → 423 → 0	0 → 423 → 0	19 → 387 → 18	0 → 0 → 0	0 → 0 → 0	36 → 344 → 8
16 ← 3 ← 65	40 ← 5 ← 43	67 ← 112 ← 119	65 ← 293 ← 149	3 ← 0 ← 6	0 ← 0 ← 0	0 ← 0 ← 0	7 ← 1 ← 18	0 ← 26 ← 0	0 ← 26 ← 0	9 ← 15 ← 190
84	88	298	507	9	0	0	26	26	26	214

Intersection reference numbers are in upper left corner of turning movement boxes.

JN 5868a

Figure 7
Existing Evening Peak Hour Intersection Turning Movement Volumes

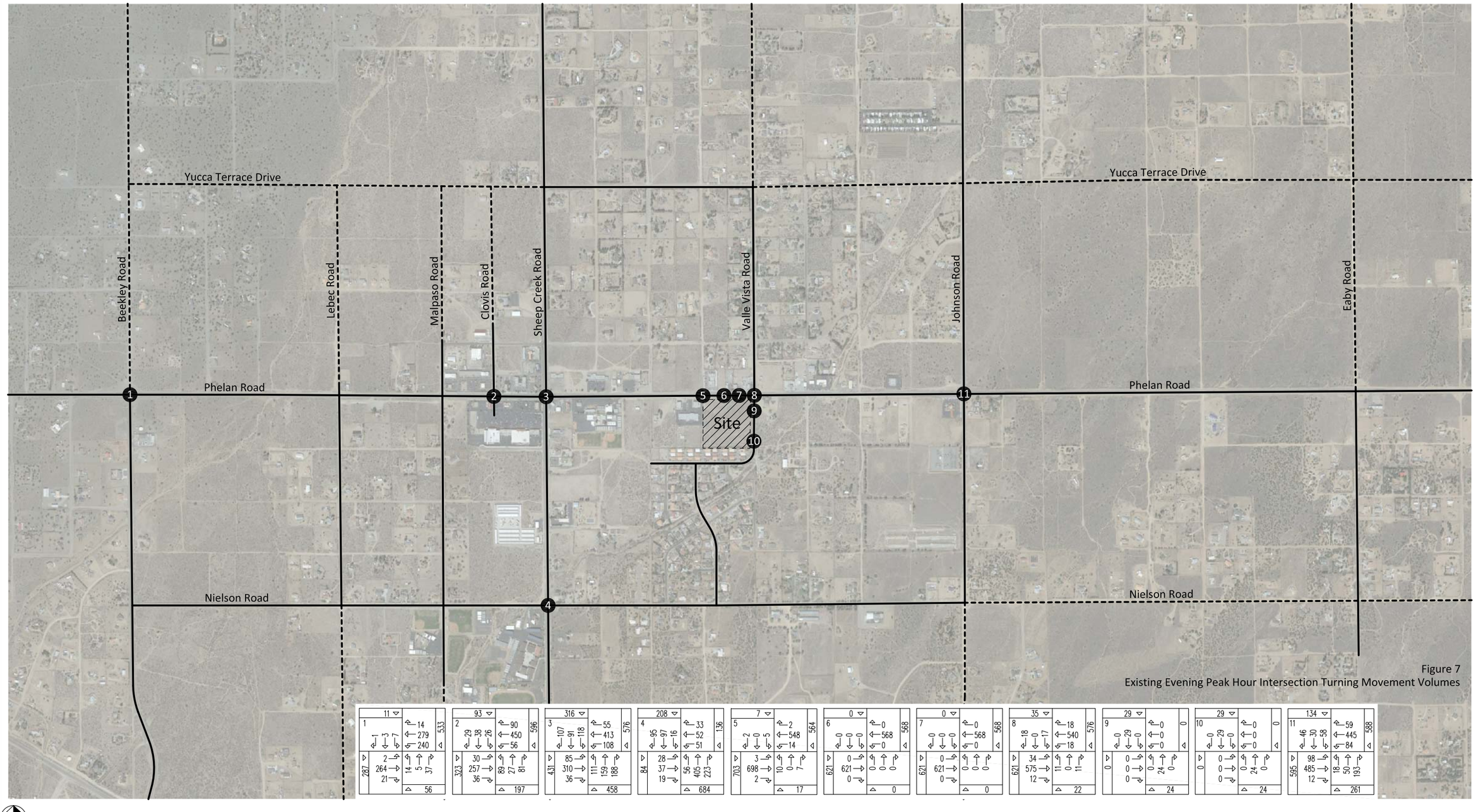
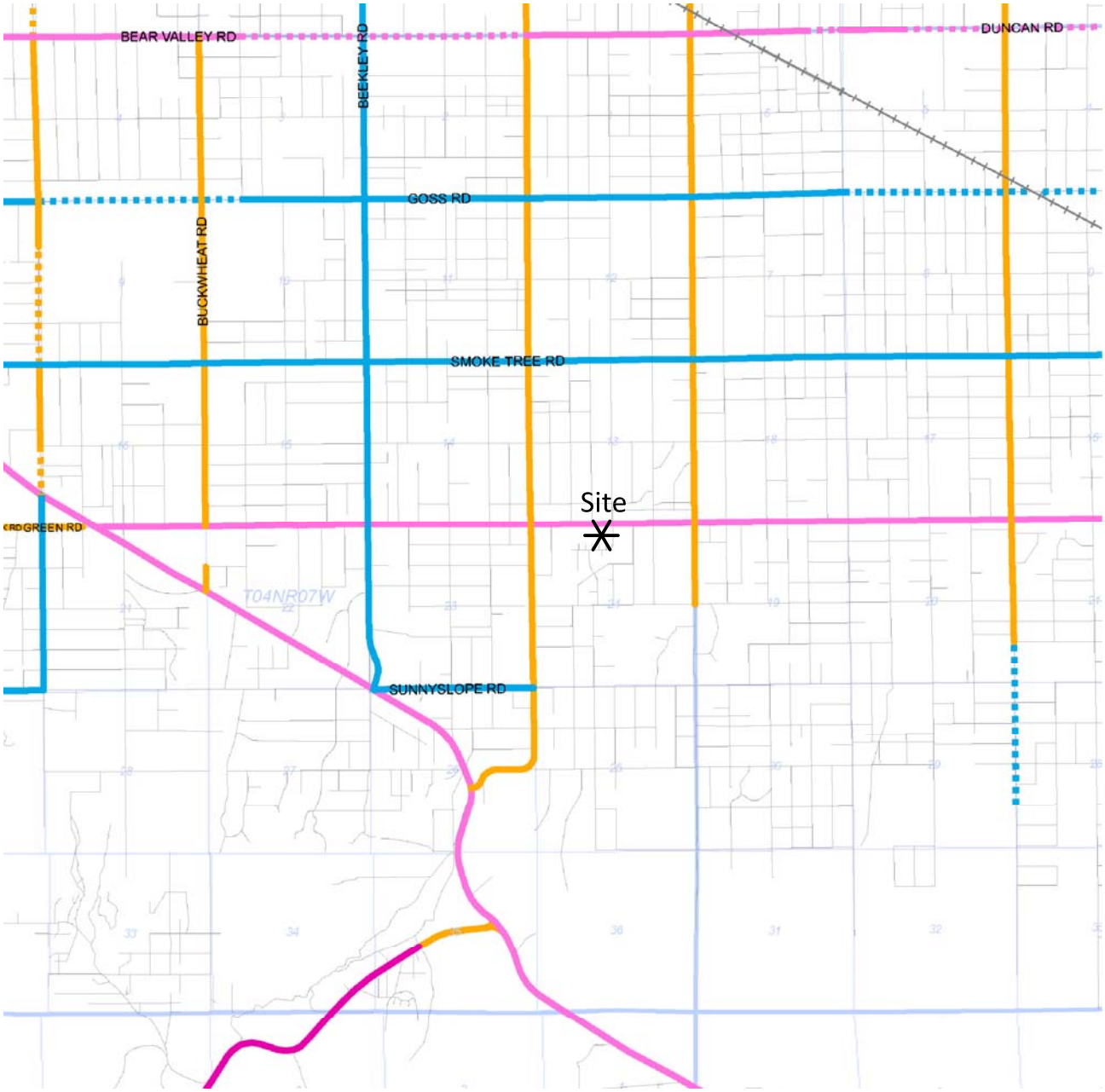


Figure 7
Existing Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 8
County of San Bernardino General Plan Circulation Element



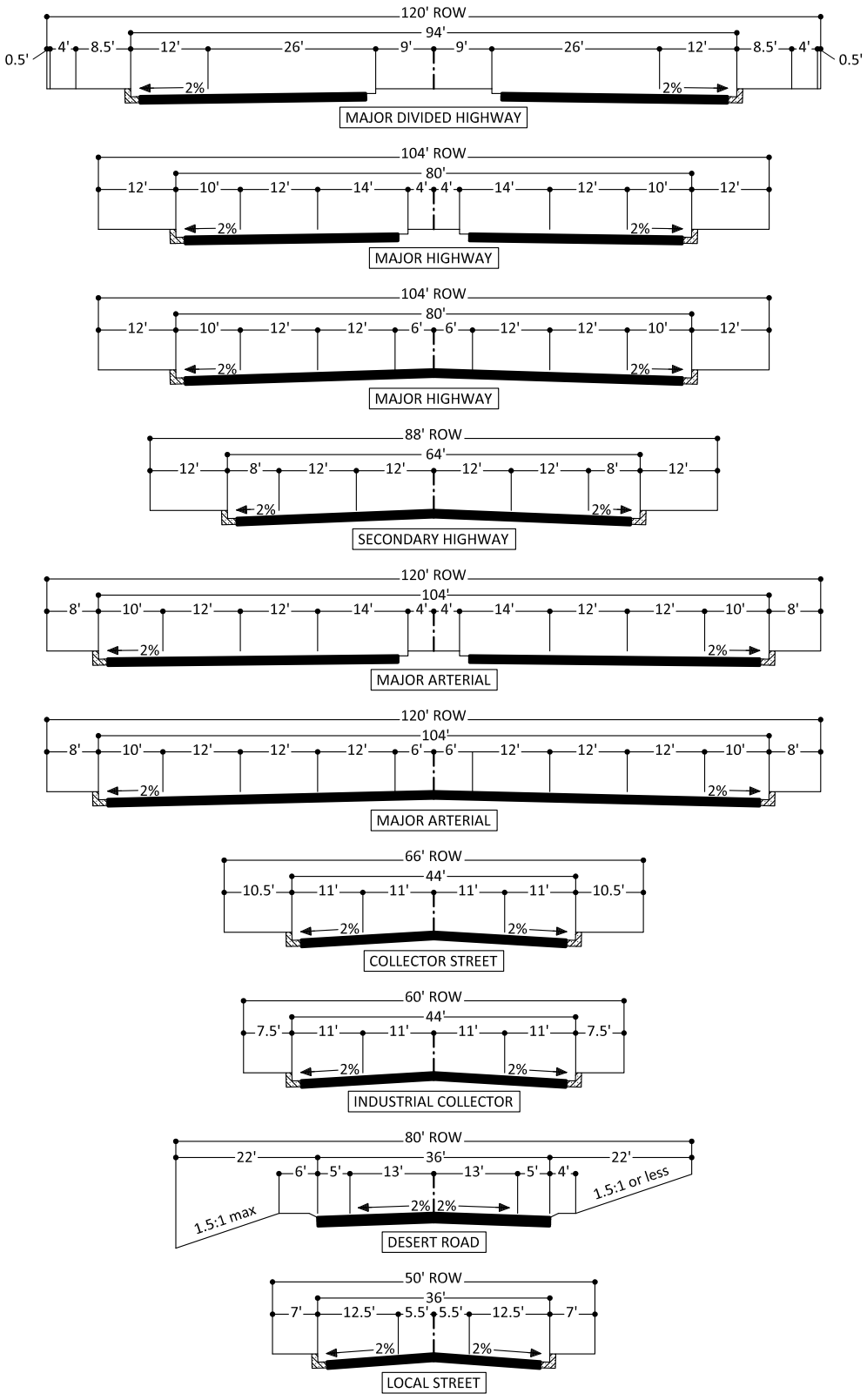
Legend

Existing	Proposed
	Freeway
	Major Divided Highway
	Major Arterial Highway
	Major Highway
	Secondary Highway
	Controlled/Limited Access Collector
	Mountain Major Highway
	Mountain Secondary Highway
	State Highway (Special Standards or Conditions)

Park & Ride — Railroad — Airport / Airfield

Source: County of San Bernardino

Figure 9
County of San Bernardino General Plan Roadway Cross-Sections



Source: County of San Bernardino

III. PROJECT TRIPS

A. Project Description

The project site is proposed to be developed with a commercial shopping center with 9 buildings totaling 77,817 square feet for multi-tenant restaurant, service station, retail and retail on a vacant 10 acre parcel currently zoned as general commercial.

B. Trip Generation

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily trips, morning peak hour inbound and outbound trips, and evening peak hour inbound and outbound trips for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes are determined. Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012.

As shown in Table 2, the proposed development is projected to generate a total of approximately 8,895 daily vehicle trips, 268 which will occur during the morning peak hour and 453 of which will occur during the evening peak hour.

It should be noted that for the project land uses, a portion of the trips would come from pass-by trips, trips that are currently on the roadway system. The traffic volumes from the shopping center/fast food restaurant/service station land uses have been reduced as a result of pass-by trips.

Traffic volumes shown in Table 2 consist of the total trips generated for each project land use. As a restaurant/service station trip generated by the project will also be making trips to the commercial retail land use within the project, a double counting of those trips occurs. In order to analyze a "conservative" scenario in terms of the assignment of trips, the traffic volumes from the project site have not been reduced as a result of internal interaction between the proposed land uses.

C. Trip Distribution

The San Bernardino Transportation Analysis Model has been used to evaluate the regional distribution of project trips. A select zone (trip distribution) analysis was performed using the San Bernardino Transportation Analysis Model with the assistance of Southern California Association of Governments staff. The socio-economic data inputs to the San Bernardino Transportation Analysis Model are representative of the planned project development intensity. Figures 10 and 11 contain the directional distributions of the project trips for the proposed land uses.

D. Trip Assignment

Based on the identified trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figures 12 to 19 for Opening Year (2017) to Opening Year (2024), respectively. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 20 to 35, respectively for Opening Year (2017) to Opening Year (2024).

E. Traffic Contribution Test

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (Opening Year or Horizon Year) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

For Opening Year (2017), Figure 36 graphically depicts the project trip contribution test volumes on all of the roadways segments adjacent to the potential intersection analysis locations previously identified, until the project volume contribution has clearly dropped below the 10 trip threshold for significant impact of intersections which currently operate at Level of Service E.

For Opening Year (2024), Figure 37 graphically depicts the project trip contribution test volumes on all of the roadways segments adjacent to the potential intersection analysis locations previously identified, until the project volume contribution has clearly dropped below the 50 trip threshold and 100 trip threshold.

F. Freeway Evaluation

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does contribute trips greater than the arterial link threshold volume of 50 two-way trips in the morning and evening peak hours in the County of San Bernardino.

Table 2

Project Trip Generation[1]

Land Use	Quantity[2]	Units[3]	Peak Hour						Daily
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
Trip Generation Rates									
Shopping Center (67,407 square feet)		TSF	1.13	0.70	1.83	3.28	3.55	6.83	77.96
High Turnover (Sit-Down) Restaurant		TSF	5.95	4.86	10.81	5.91	3.94	9.85	127.15
Fast Food with Drive-Thru Window		TSF	23.16	22.26	45.42	16.98	15.67	32.65	496.12
Service Station with Convenience Market		FP	5.08	5.08	10.16	6.75	6.76	13.51	162.78
Trips Generated									
Shopping Center[4]	24.770	TSF	28	17	45	81	88	169	1,931
Pass-by Shopping Center[5]	0/34/26	%	0	0	0	-28	-30	-58	0
Subtotal Phase 1			28	17	45	53	58	111	1,931
Shopping Center[4]	9.285	TSF	10	6	16	30	33	63	724
Pass-by Shopping Center[5]	0/34/26	%	0	0	0	-10	-11	-21	0
Subtotal Phase 2			10	6	16	20	22	42	724
High Turnover (Sit-Down) Restaurant	4.100	TSF	24	20	44	24	16	40	521
Subtotal Phase 3			24	20	44	24	16	40	521
Service Station with Convenience Market	12	FP	61	61	122	81	81	162	1,953
Pass-by Service Station with Convenience Mkt[5]	62/56/0	%	-38	-38	-76	-45	-45	-90	0
Subtotal Phase 4			23	23	46	36	36	72	1,953
Shopping Center[4]	12.355	TSF	14	9	23	41	44	85	963
Pass-by Shopping Center[5]	0/34/26	%	0	0	0	-14	-15	-29	0
Subtotal Phase 5			14	9	23	27	29	56	963
Shopping Center[4]	9.547	TSF	11	7	18	31	34	65	744
Pass-by Shopping Center[5]	0/34/26	%	0	0	0	-11	-12	-22	0
Subtotal Phase 6			11	7	18	20	22	42	744
Fast Food with Drive-Thru Window	2.350	TSF	54	52	106	40	37	77	1,166
Pass-by Fast Food with Drive-Thru[5]	49/50/0	%	-26	-25	-52	-20	-19	-39	0
Shopping Center[4]	6.450	TSF	7	5	12	21	23	44	503
Pass-by Shopping Center[5]	0/34/26	%	0	0	0	-7	-8	-15	0
Subtotal Phase 7			35	32	67	34	33	67	1,669
Shopping Center[4]	5.000	TSF	6	4	10	16	18	34	390
Pass-by Shopping Center[5]	0/34/26	%	0	0	0	-5	-6	-12	0
Subtotal Phase 8			6	4	10	11	12	23	390
Total	68.270		151	118	269	225	228	453	8,895

Land Use	Description	Phase	Phase 1	Phase 5	Phase 6	Retail	Other
High Turnover (Sit-Down) Restaurant	Pad A	3					4,100
Retail / Fast Food with Drive-Thru Window	Pad B	7			8,800	6,450	2,350
Service Station with Convenience Market	Pad C	4					3,960
Shopping Center	Pad D	8				5,000	
Shopping Center	Major A	1	12,000			12,000	
Shopping Center	Major A (outdoor)	1	5,243			5,243	
Shopping Center	Major B	5		12,355		12,355	
Shopping Center	Shops 1	1	7,527			7,527	
Shopping Center	Shops 2	2				9,285	
Shopping Center	Shops 3	6		9,547		9,547	
Subtotal			24,770	21,902	8,800	67,407	10,410
Total						77,817	

[1] Source: Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012, Land Use Codes 820, 932, 934 and 945.

[2] Source: Drawing A-0 Prelimary Site Plan for Project: Commercial Development, VVR L.L.C, dated April 2015.

[3] TSF = Thousand Square Feet, FP = Fueling Positions

[4] Regression Equation for Office Code 820: DAILY TRIPS=EXP(0.65*LN(AREA in Thousands)+5.83).

[5] Institute of Transportation Engineers, Trip Generation Manual, 9th Edition Manual, 2012, Passby percentages for 820, 934 and 945.

Figure 10
Project Outbound Trip Distribution

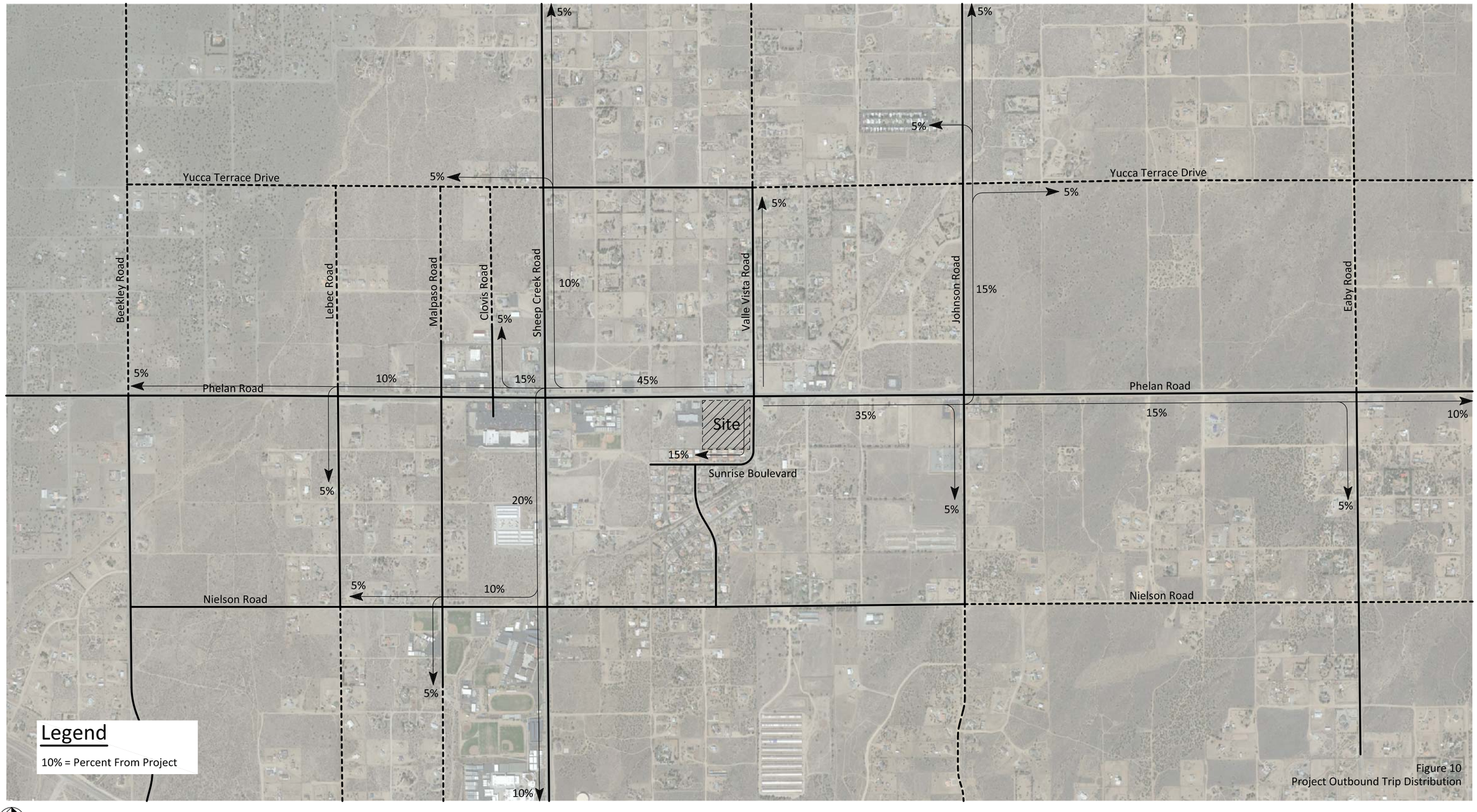


Figure 11
Project Inbound Trip Distribution

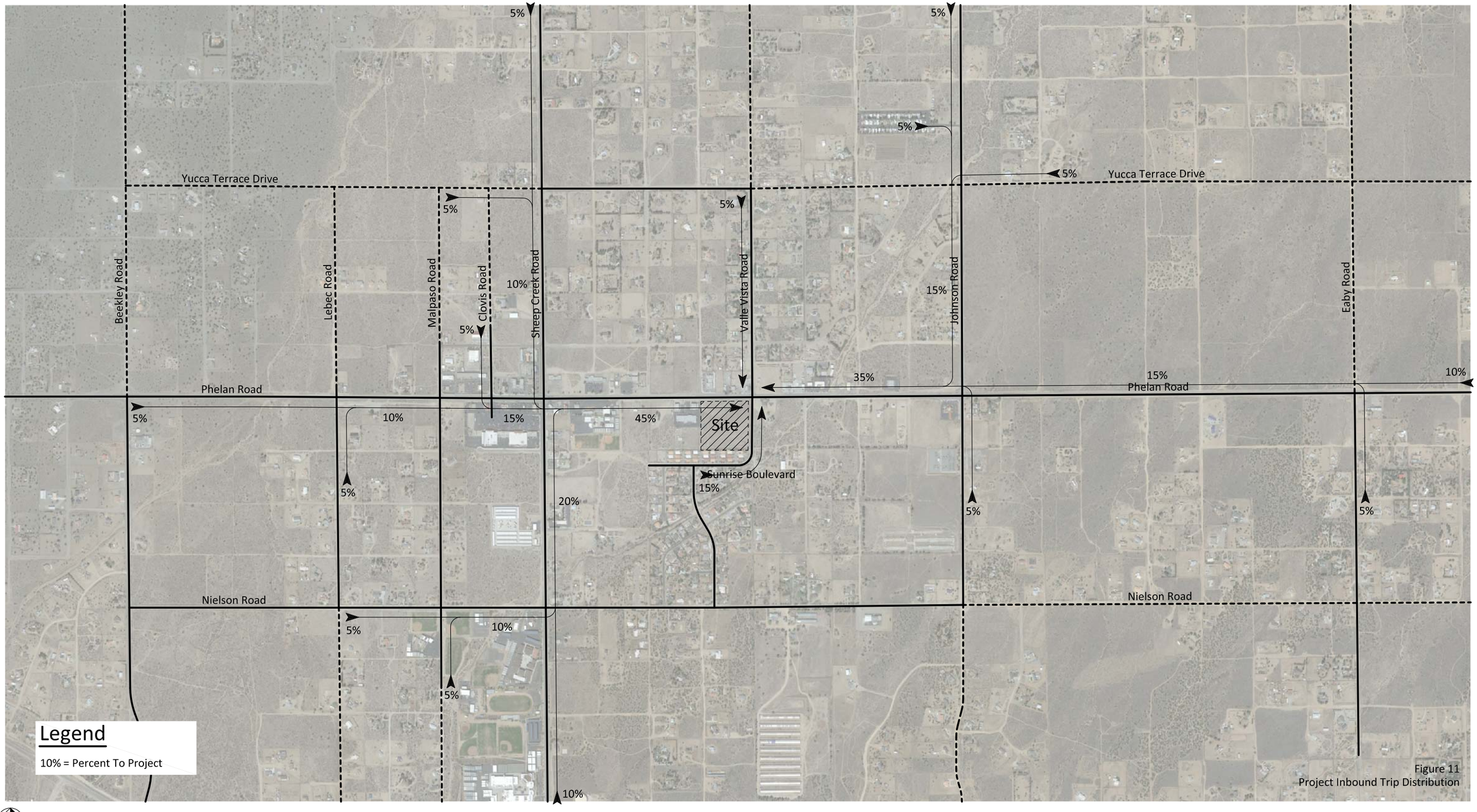


Figure 11
Project Inbound Trip Distribution

JN 5868a

Figure 12
Opening Year (2017) Project Average Daily Traffic Volumes

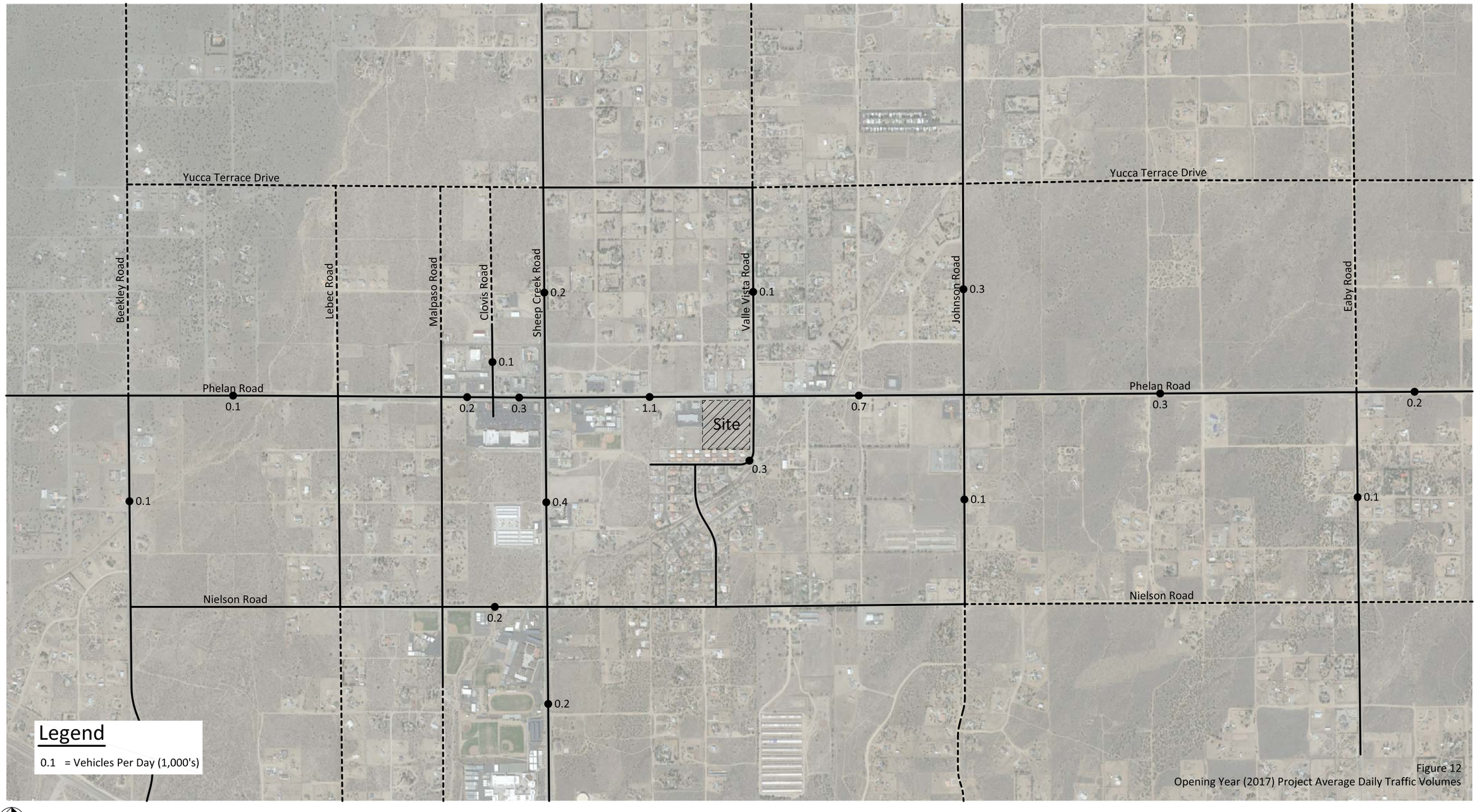


Figure 12
Opening Year (2017) Project Average Daily Traffic Volumes

Figure 13
Opening Year (2018) Project Average Daily Traffic Volumes

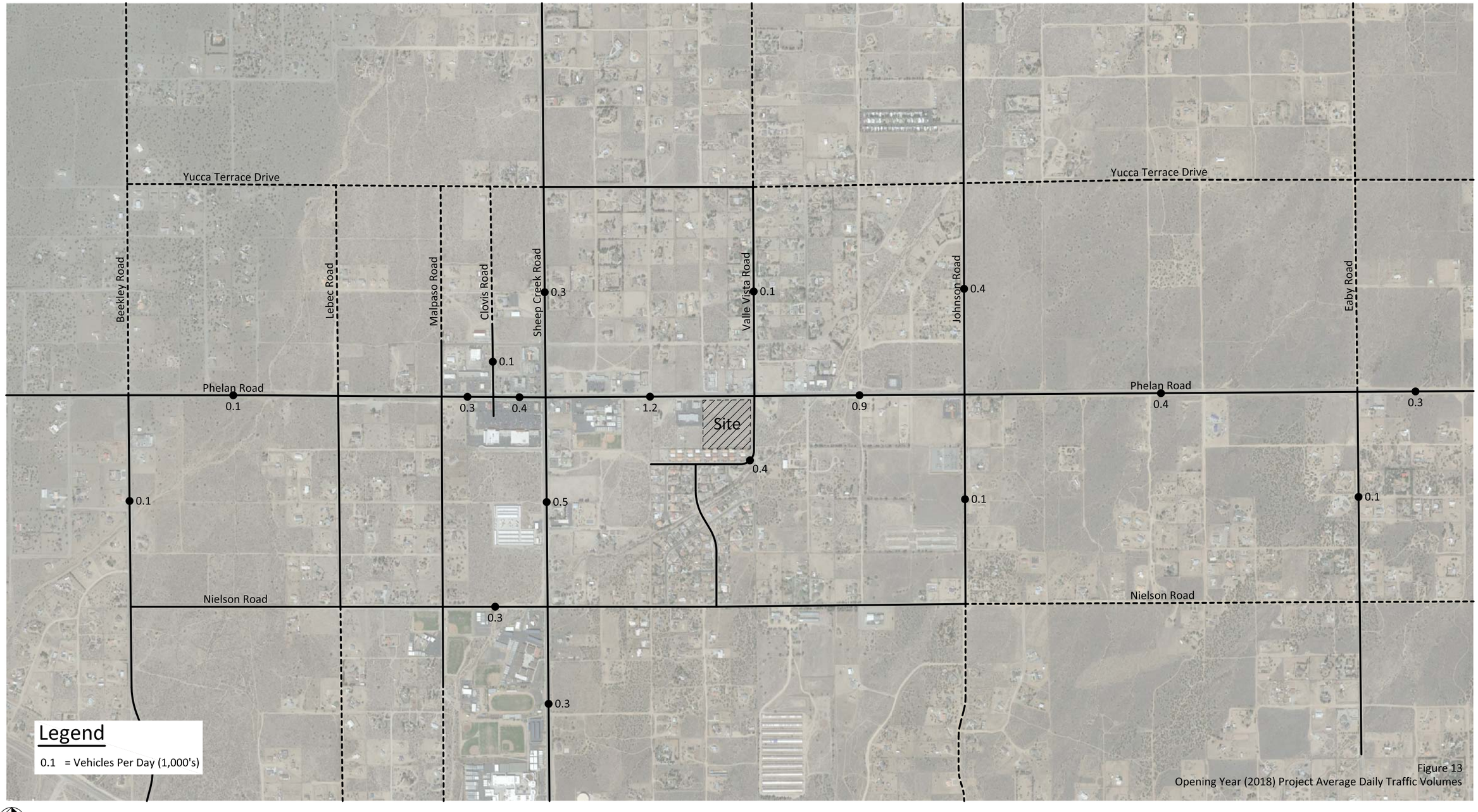


Figure 13
Opening Year (2018) Project Average Daily Traffic Volumes

Figure 14
Opening Year (2019) Project Average Daily Traffic Volumes

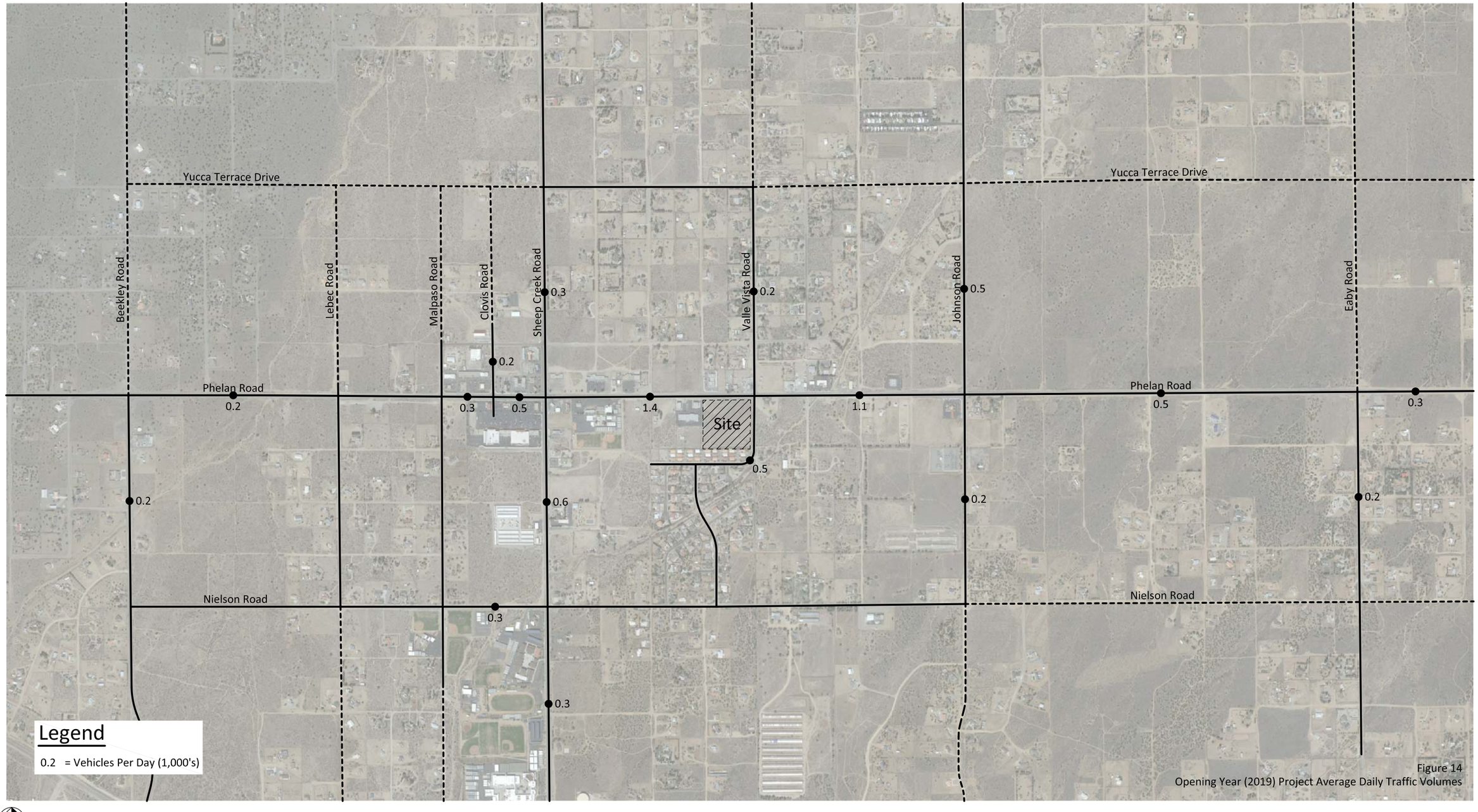


Figure 14
Opening Year (2019) Project Average Daily Traffic Volumes

Figure 15
Opening Year (2020) Project Average Daily Traffic Volumes

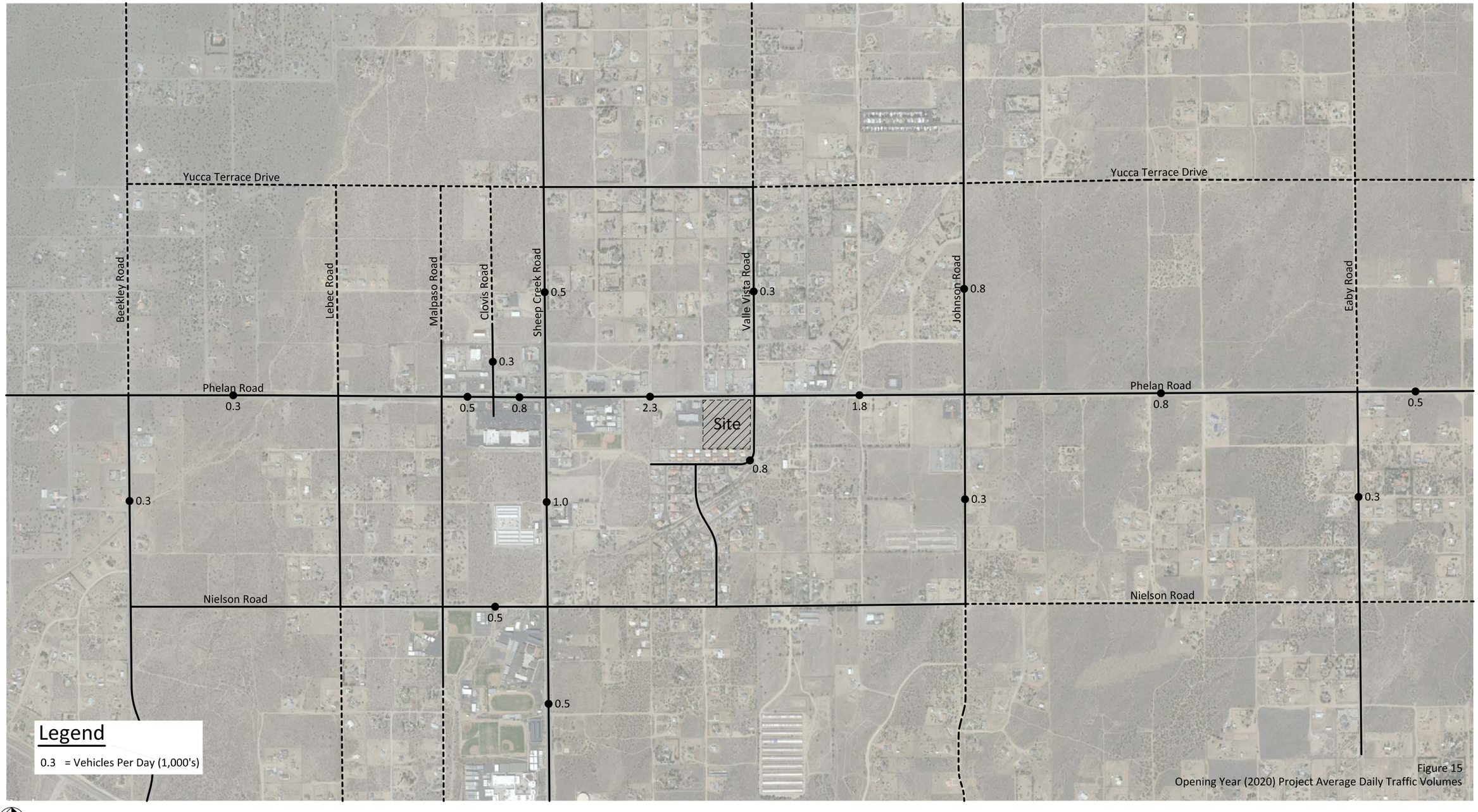


Figure 15
Opening Year (2020) Project Average Daily Traffic Volumes

Figure 16
Opening Year (2021) Project Average Daily Traffic Volumes

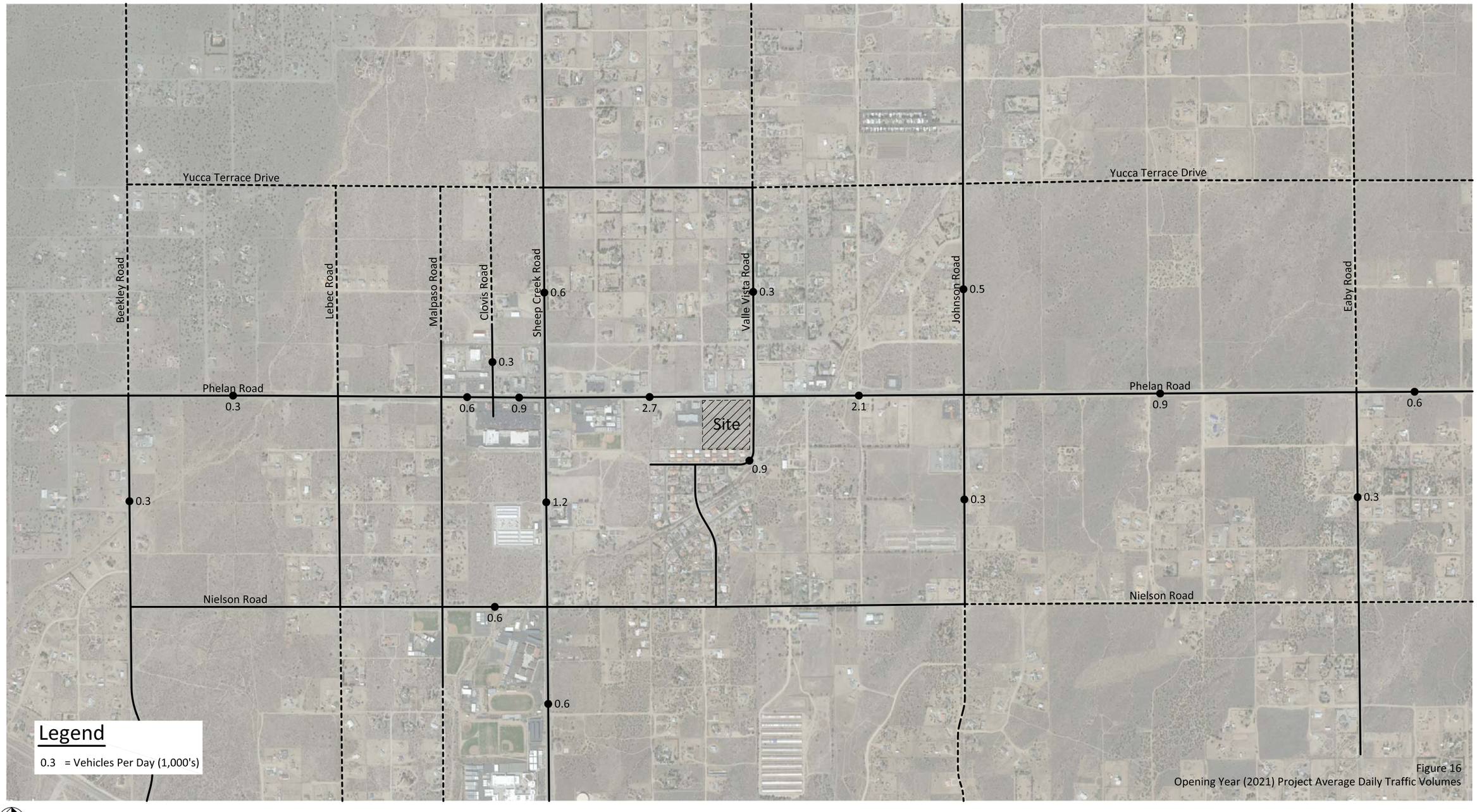


Figure 16
Opening Year (2021) Project Average Daily Traffic Volumes

Figure 17
Opening Year (2022) Project Average Daily Traffic Volumes

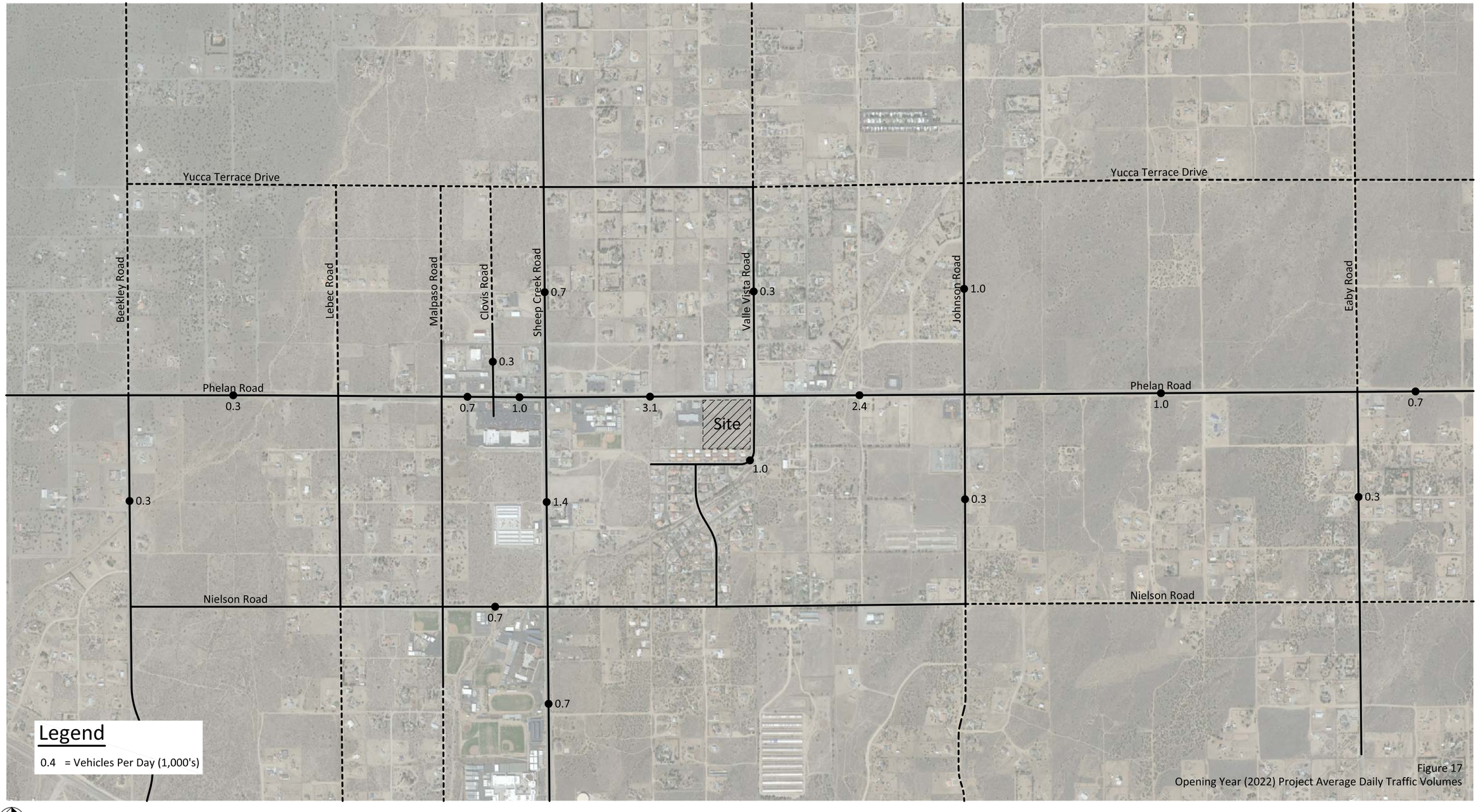


Figure 17
Opening Year (2022) Project Average Daily Traffic Volumes

Figure 18
Opening Year (2023) Project Average Daily Traffic Volumes

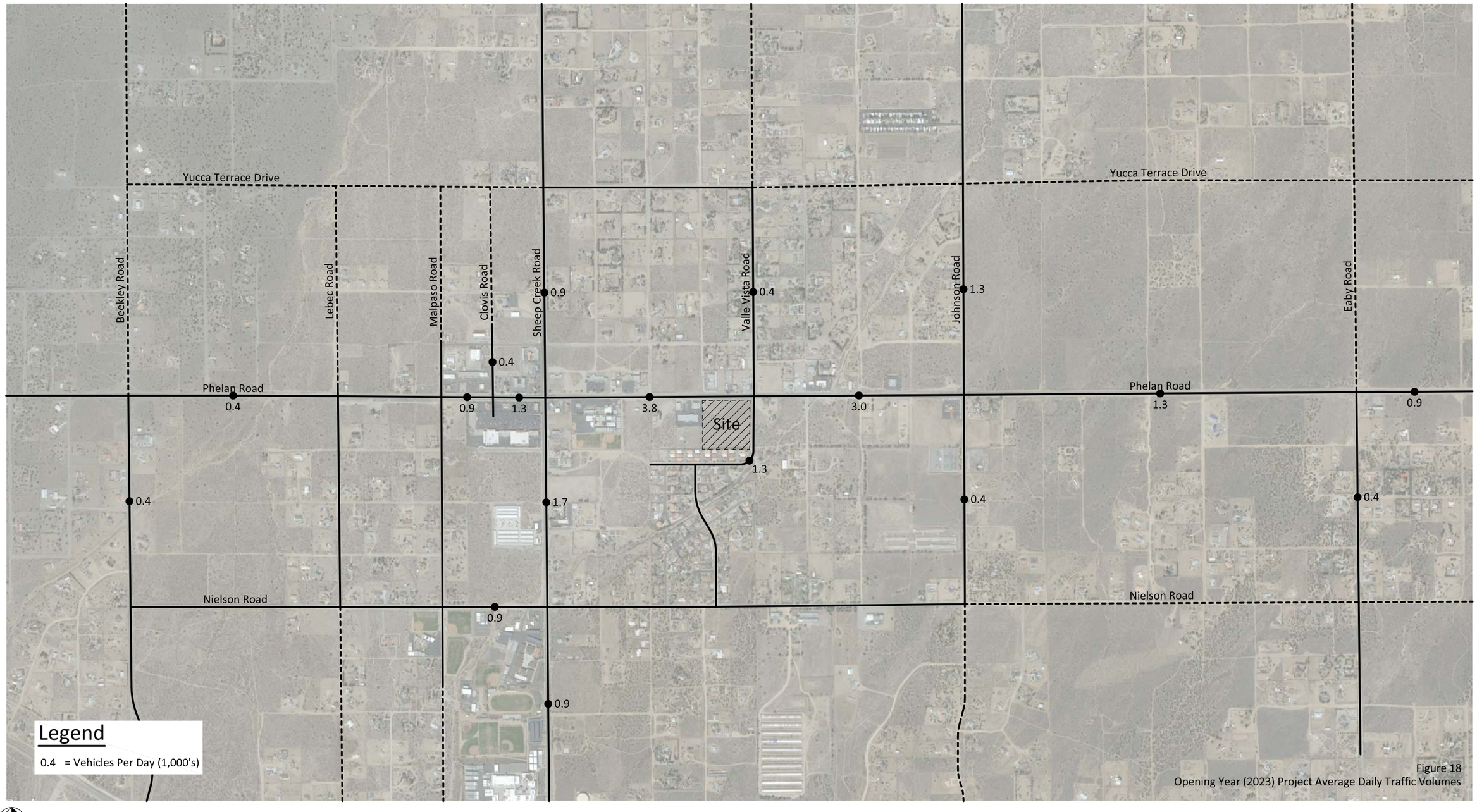


Figure 18
Opening Year (2023) Project Average Daily Traffic Volumes

Figure 19
Opening Year (2024) Project Average Daily Traffic Volumes

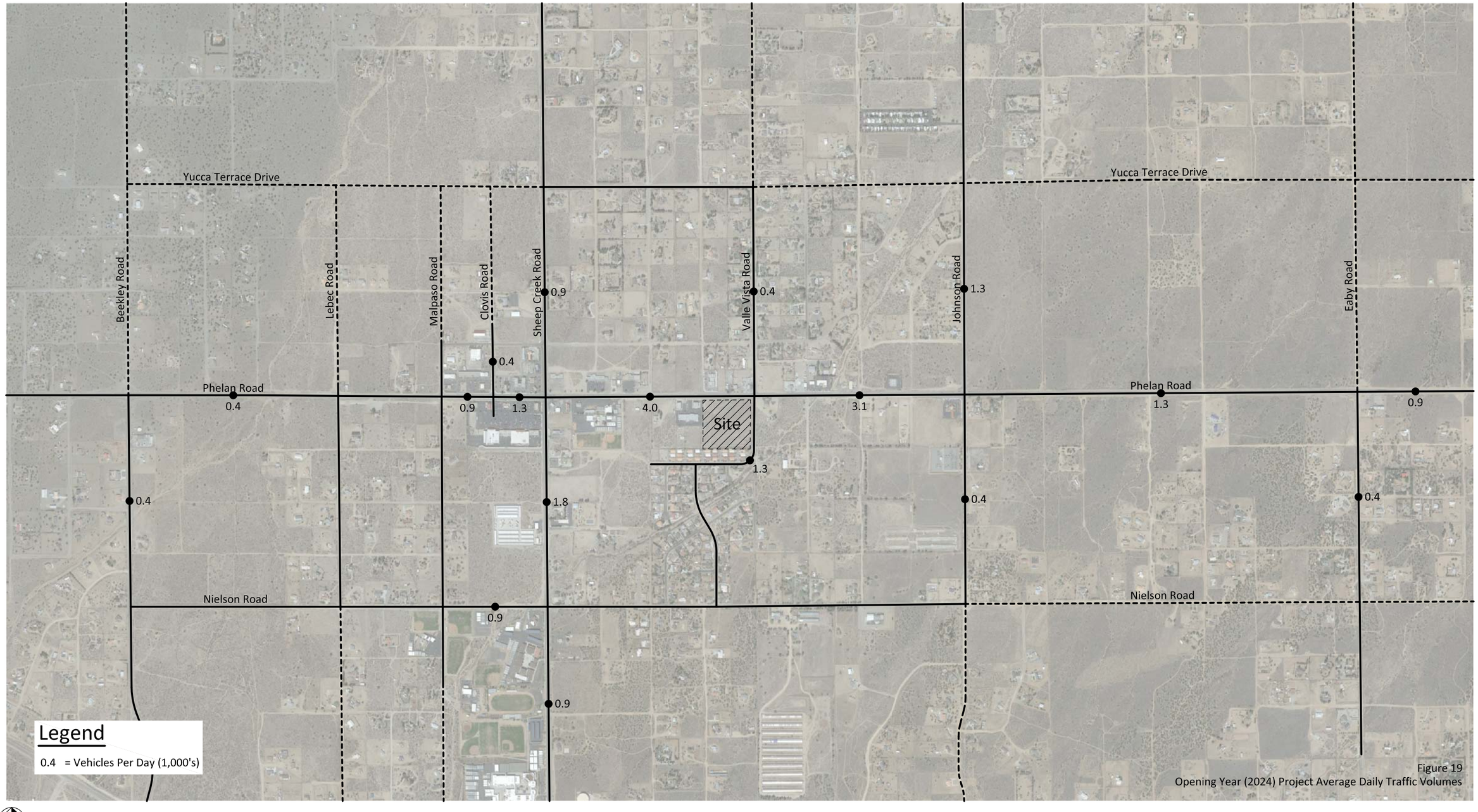


Figure 19
Opening Year (2024) Project Average Daily Traffic Volumes

Figure 20
Opening Year (2017) Project
Morning Peak Hour Intersection Turning Movement Volumes

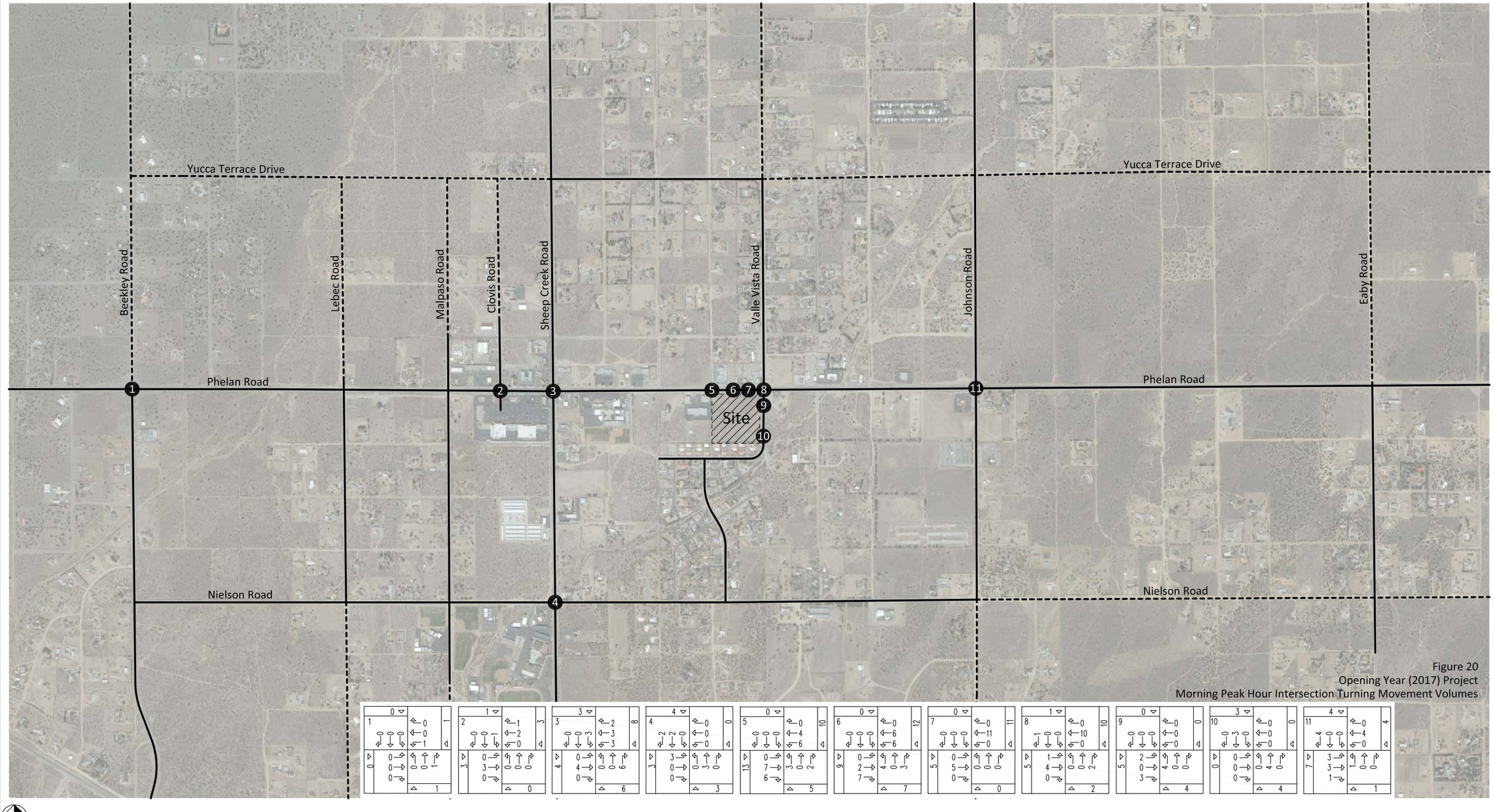


Figure 20
Opening Year (2017) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 21
Opening Year (2017) Project
Evening Peak Hour Intersection Turning Movement Volumes

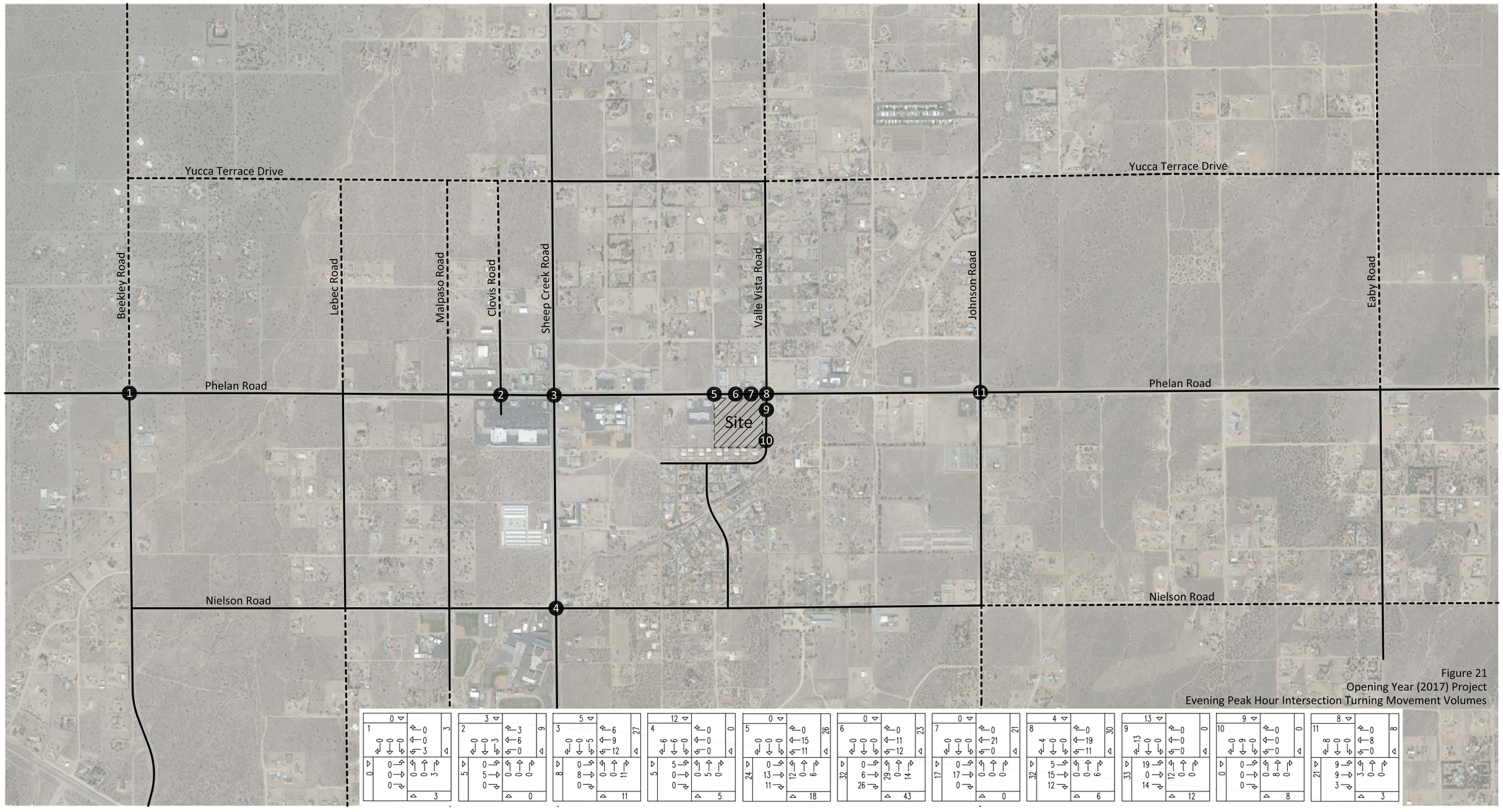


Figure 21
Opening Year (2017) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 22
Opening Year (2018) Project
Morning Peak Hour Intersection Turning Movement Volumes

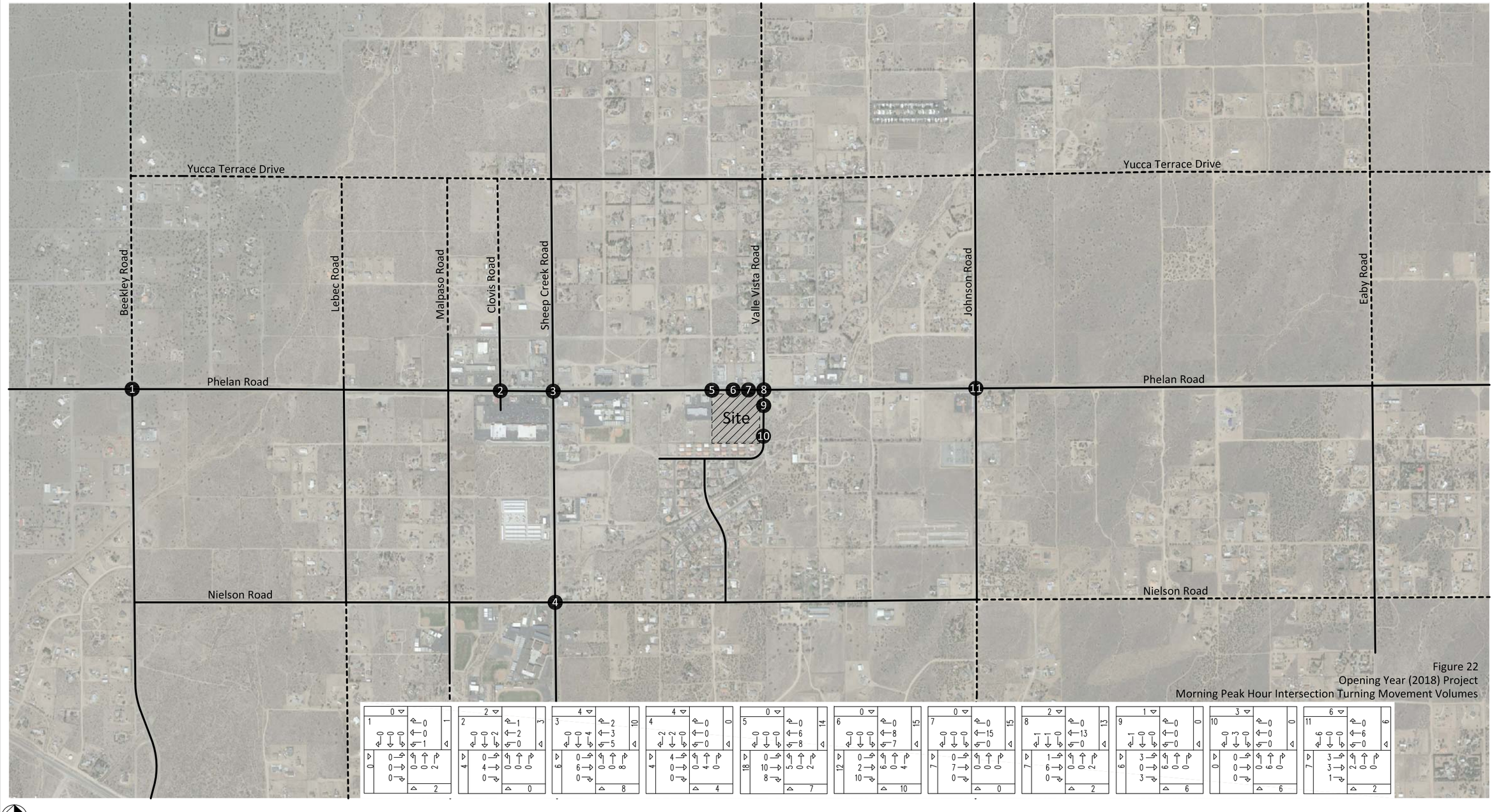


Figure 22
Opening Year (2018) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 23
Opening Year (2018) Project
Evening Peak Hour Intersection Turning Movement Volumes

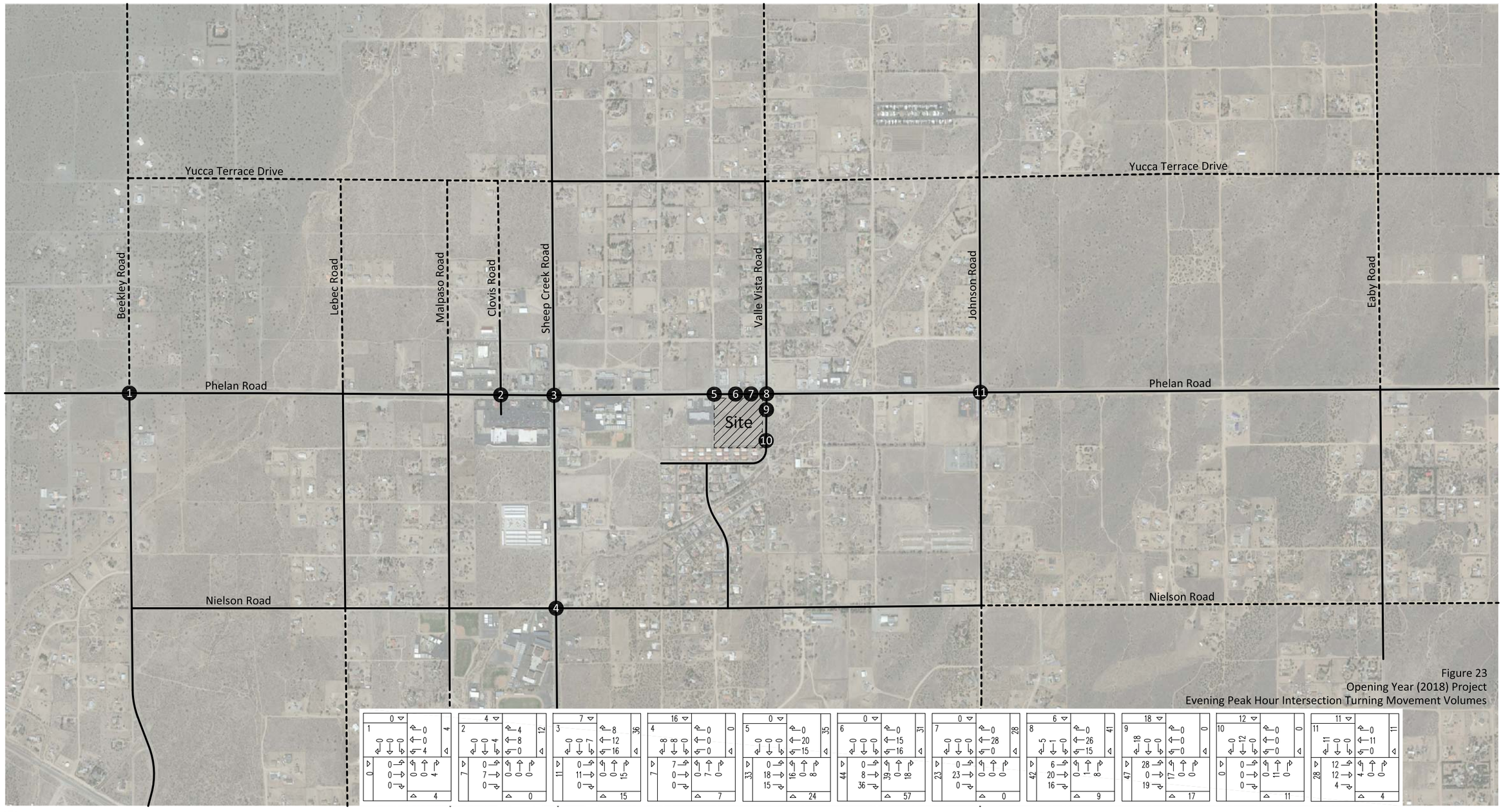


Figure 23
Opening Year (2018) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 24
Opening Year (2019) Project
Morning Peak Hour Intersection Turning Movement Volumes

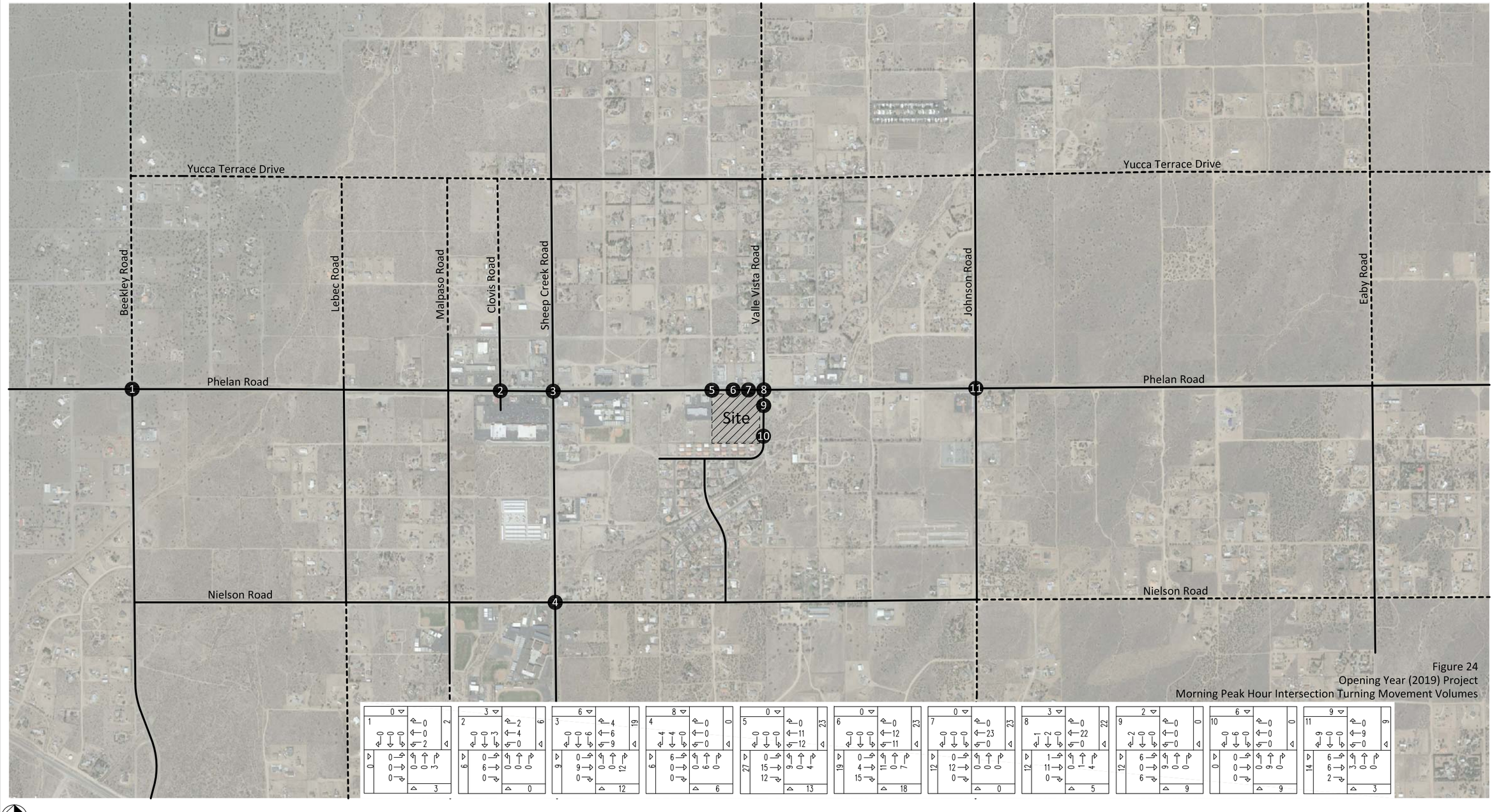


Figure 24
Opening Year (2019) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 25
Opening Year (2019) Project
Evening Peak Hour Intersection Turning Movement Volumes

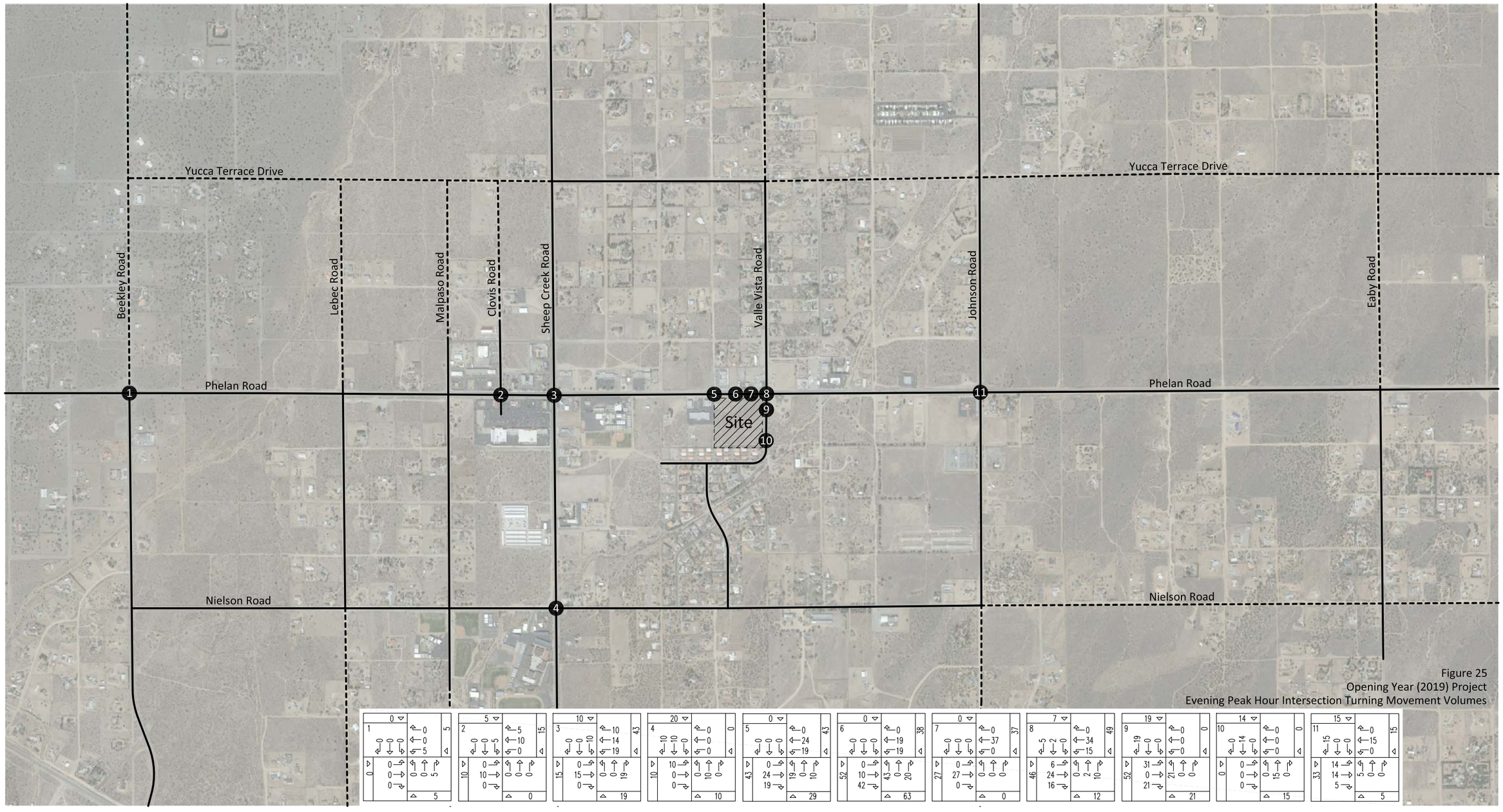


Figure 25
Opening Year (2019) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 26
Opening Year (2020) Project
Morning Peak Hour Intersection Turning Movement Volumes

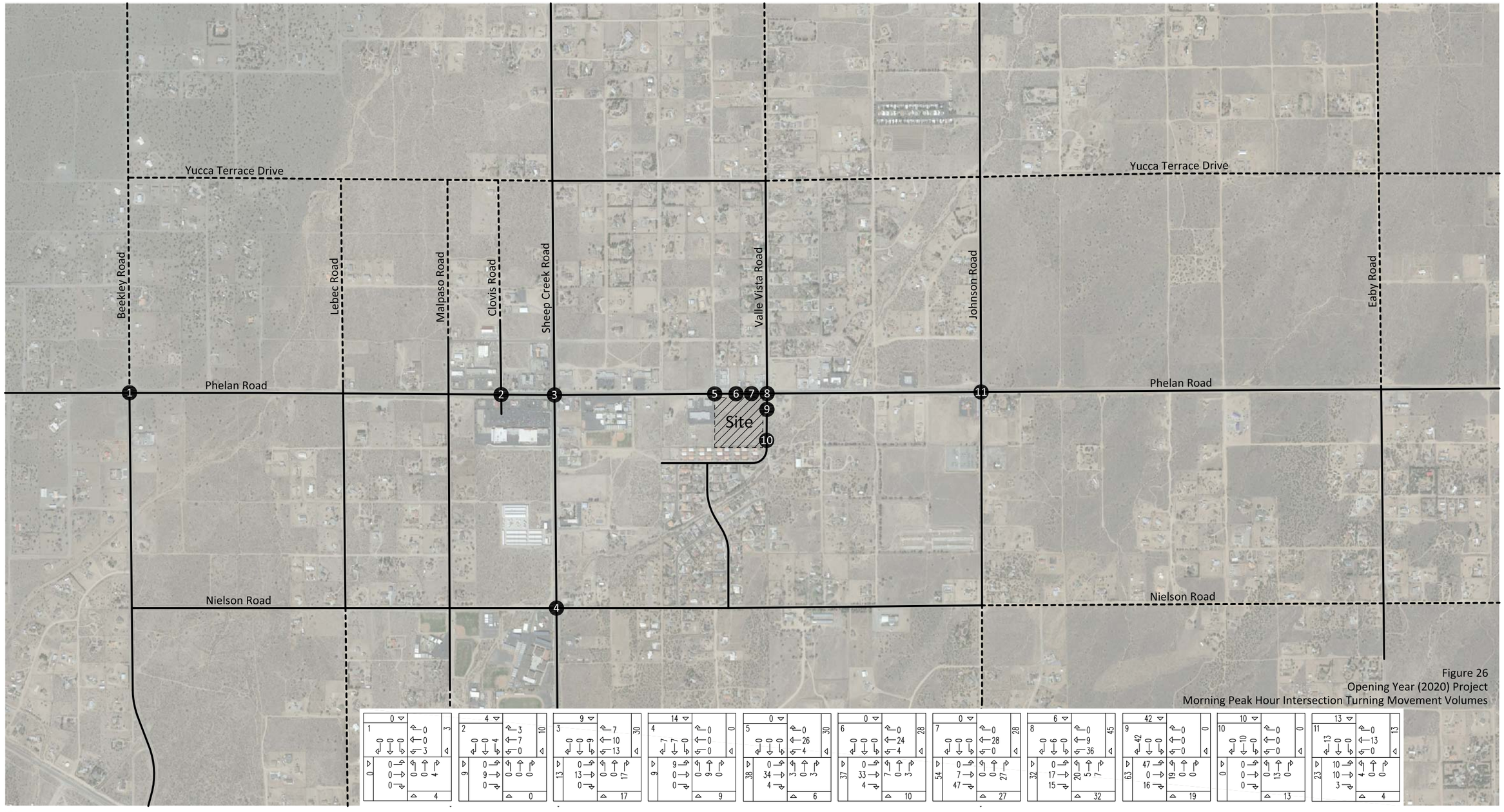


Figure 26
Opening Year (2020) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 27
Opening Year (2020) Project
Evening Peak Hour Intersection Turning Movement Volumes

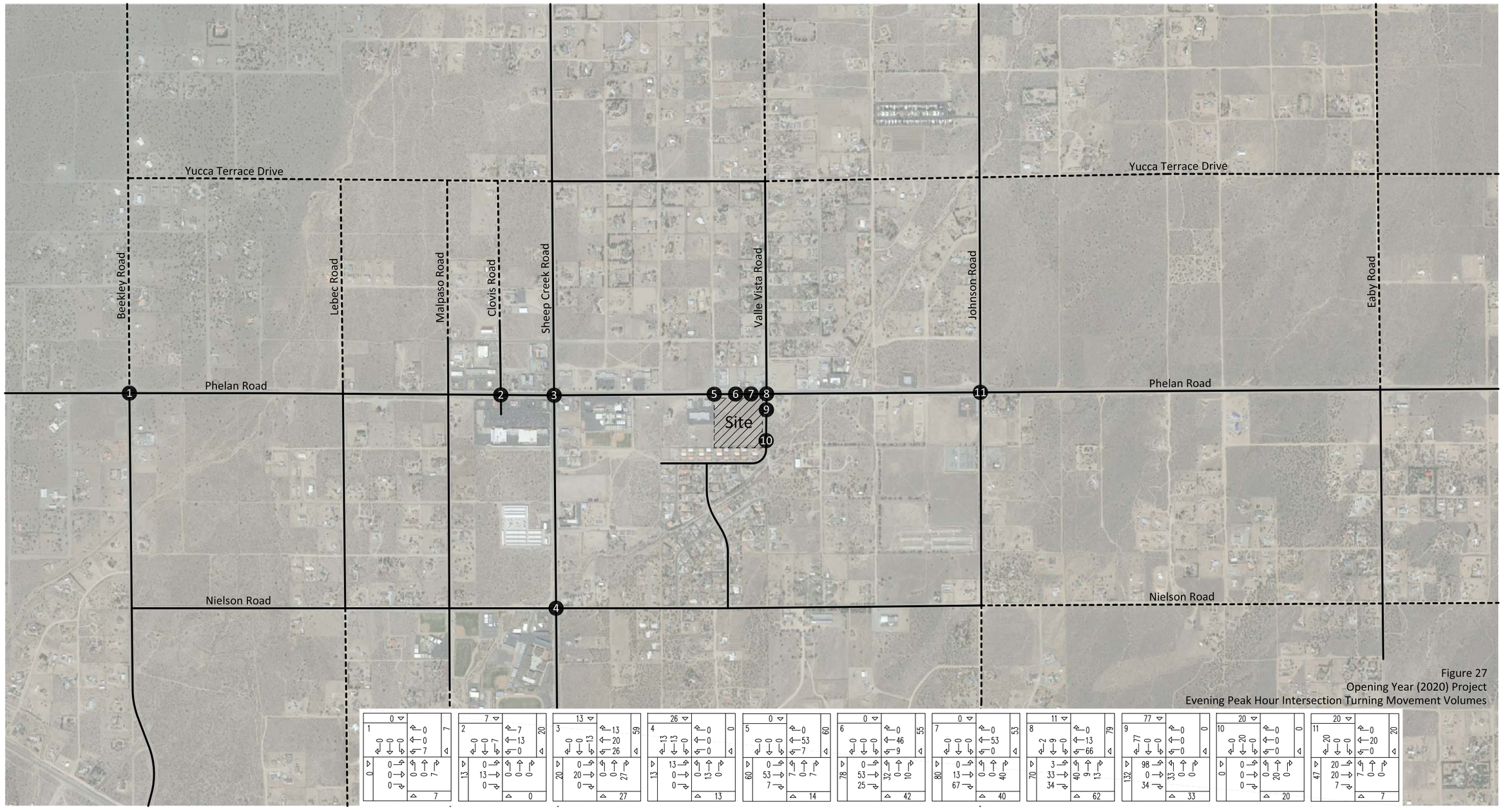


Figure 27
Opening Year (2020) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 28
Opening Year (2021) Project
Morning Peak Hour Intersection Turning Movement Volumes

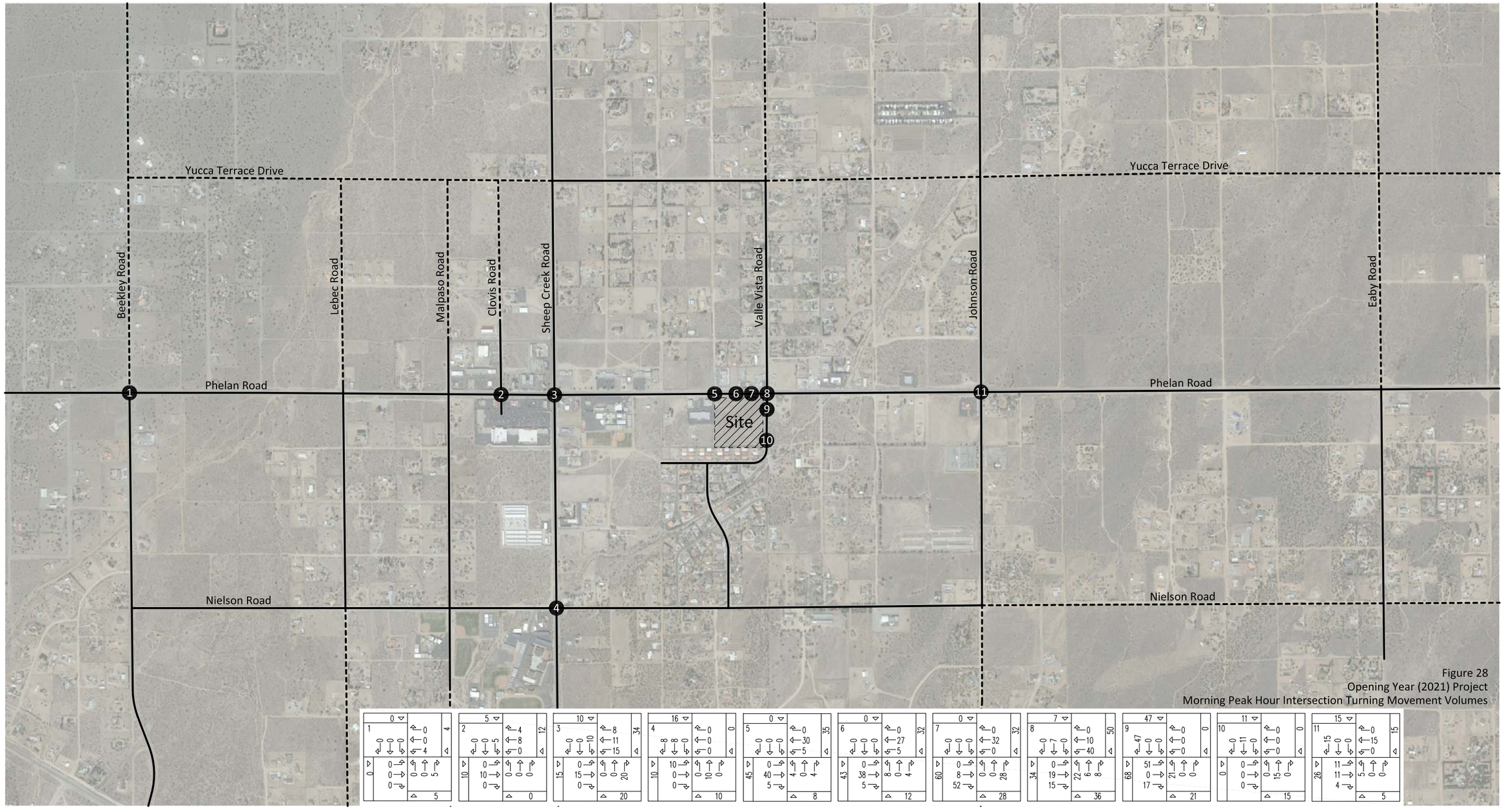


Figure 28
Opening Year (2021) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 29
Opening Year (2021) Project
Evening Peak Hour Intersection Turning Movement Volumes

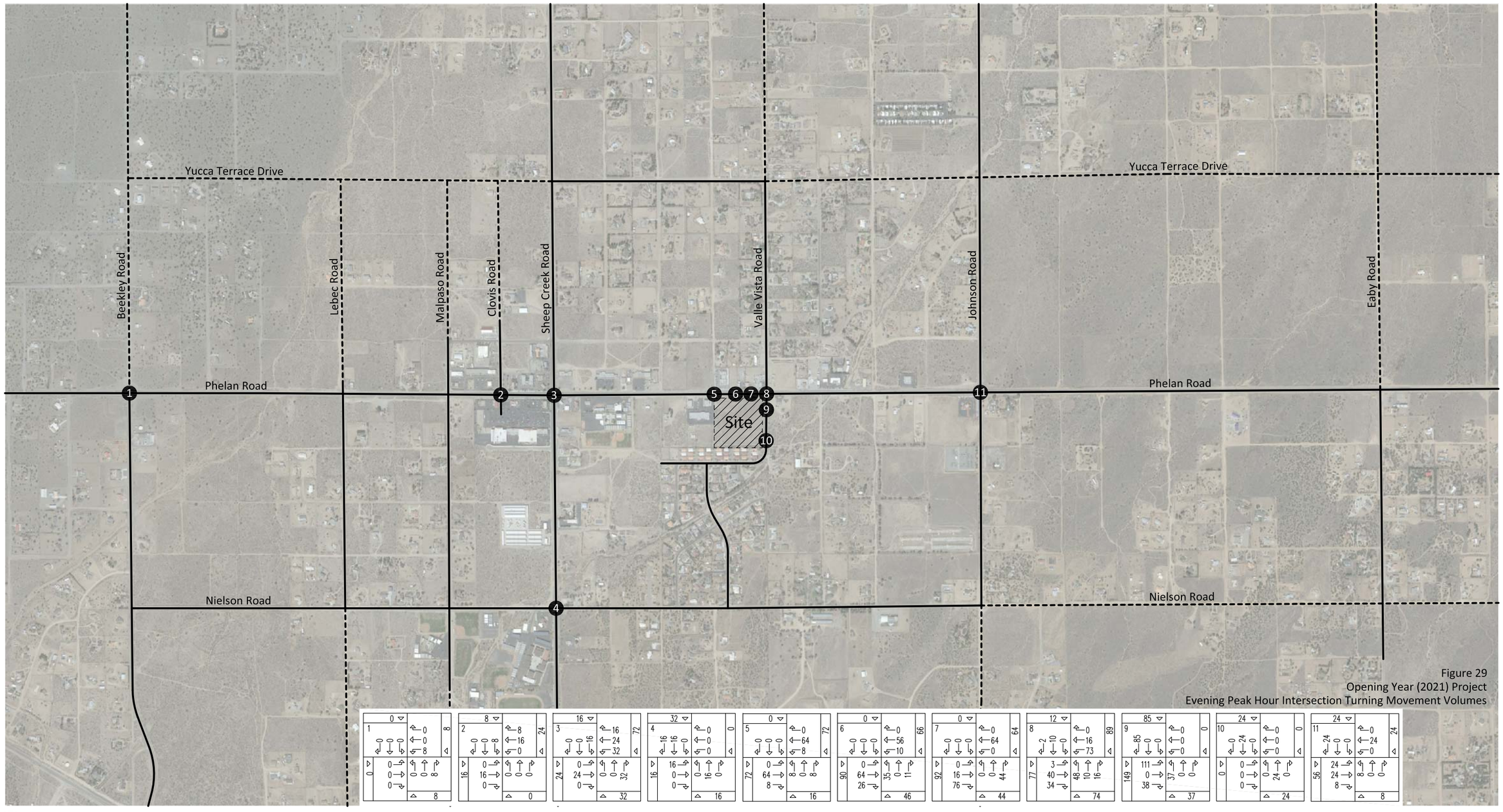


Figure 29
Opening Year (2021) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 30
Opening Year (2022) Project
Morning Peak Hour Intersection Turning Movement Volumes

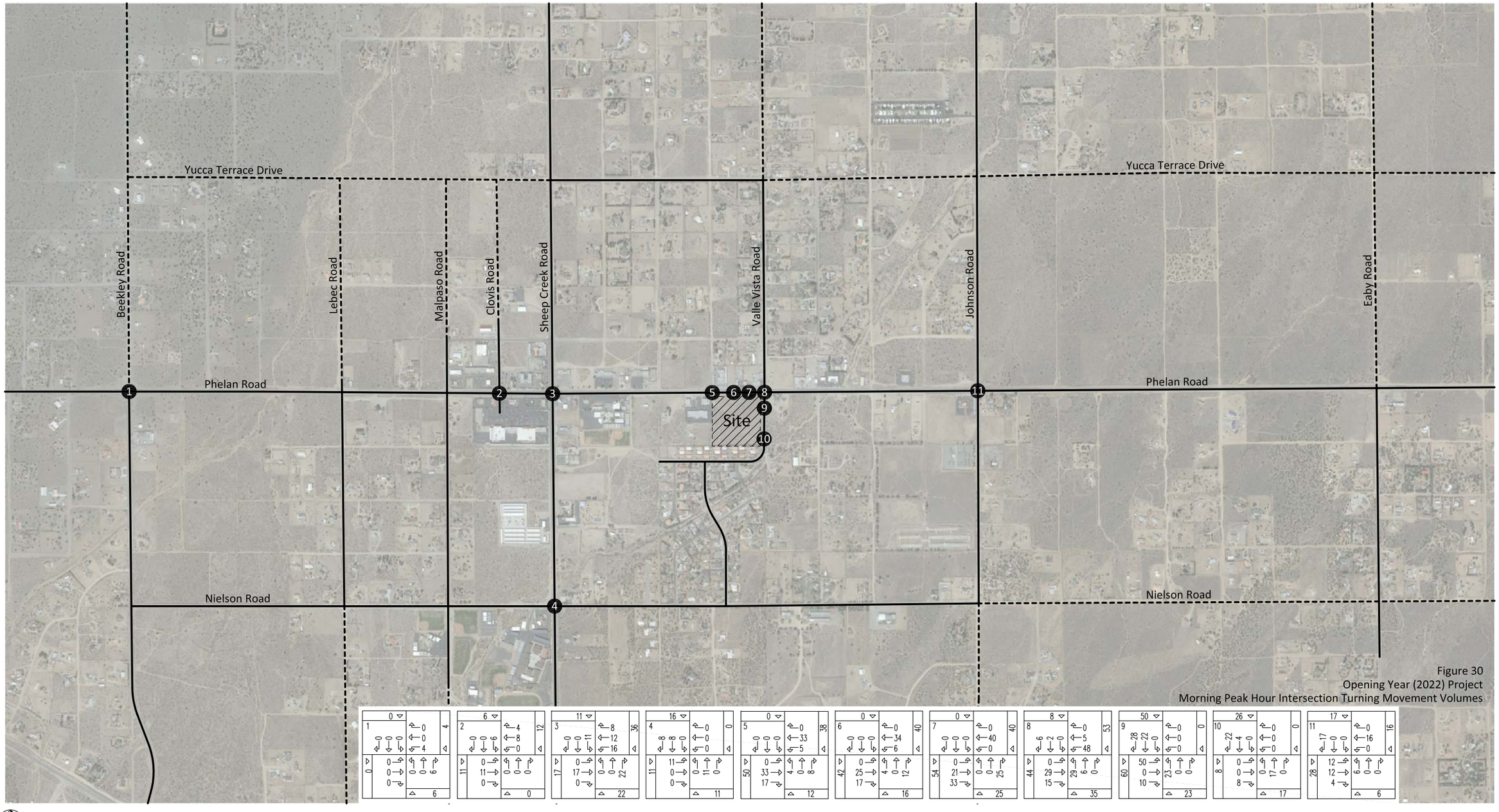


Figure 30
Opening Year (2022) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

JN 5868a

Figure 31
Opening Year (2022) Project
Evening Peak Hour Intersection Turning Movement Volumes

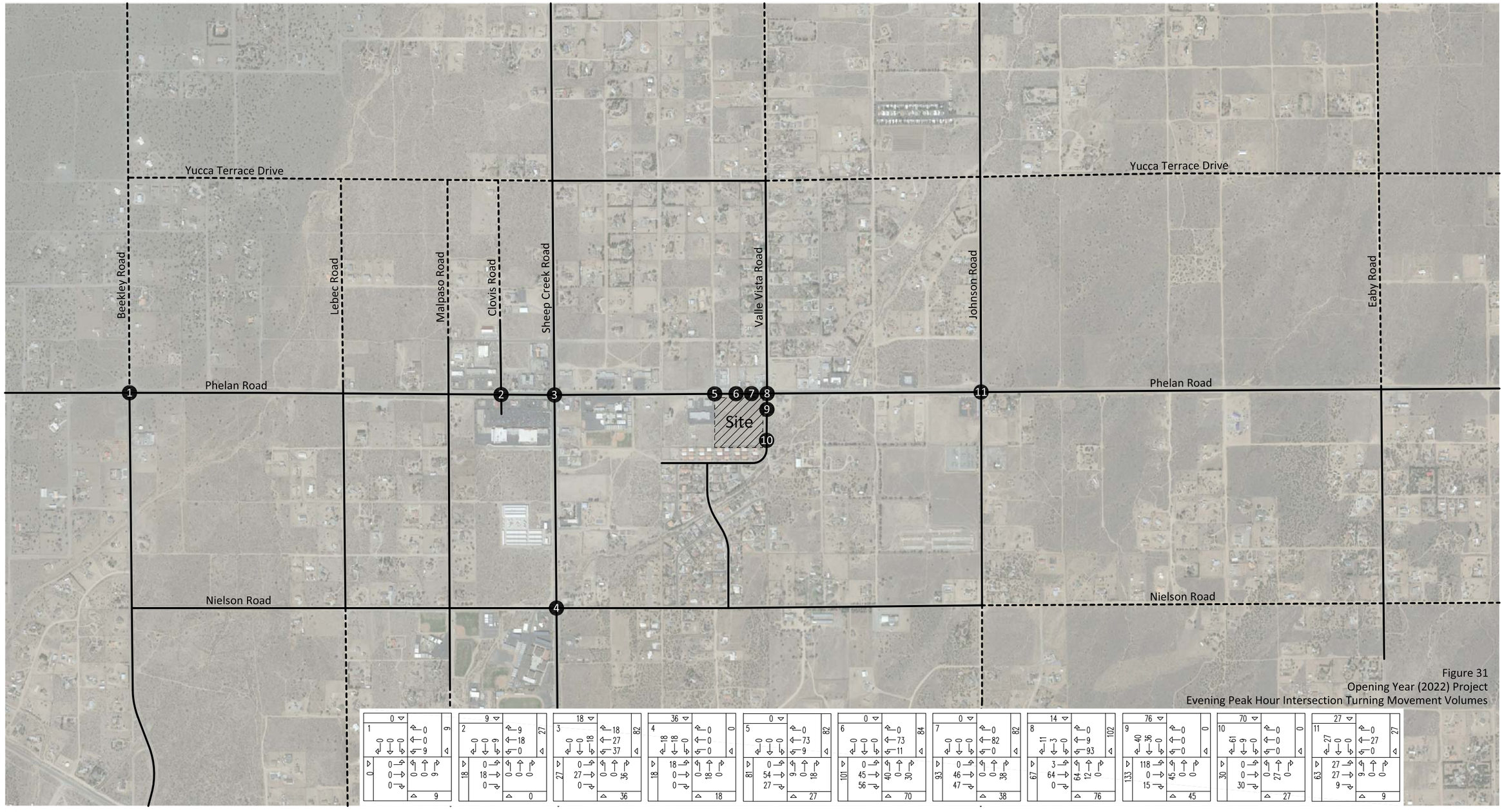


Figure 31
Opening Year (2022) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 32
Opening Year (2023) Project
Morning Peak Hour Intersection Turning Movement Volumes

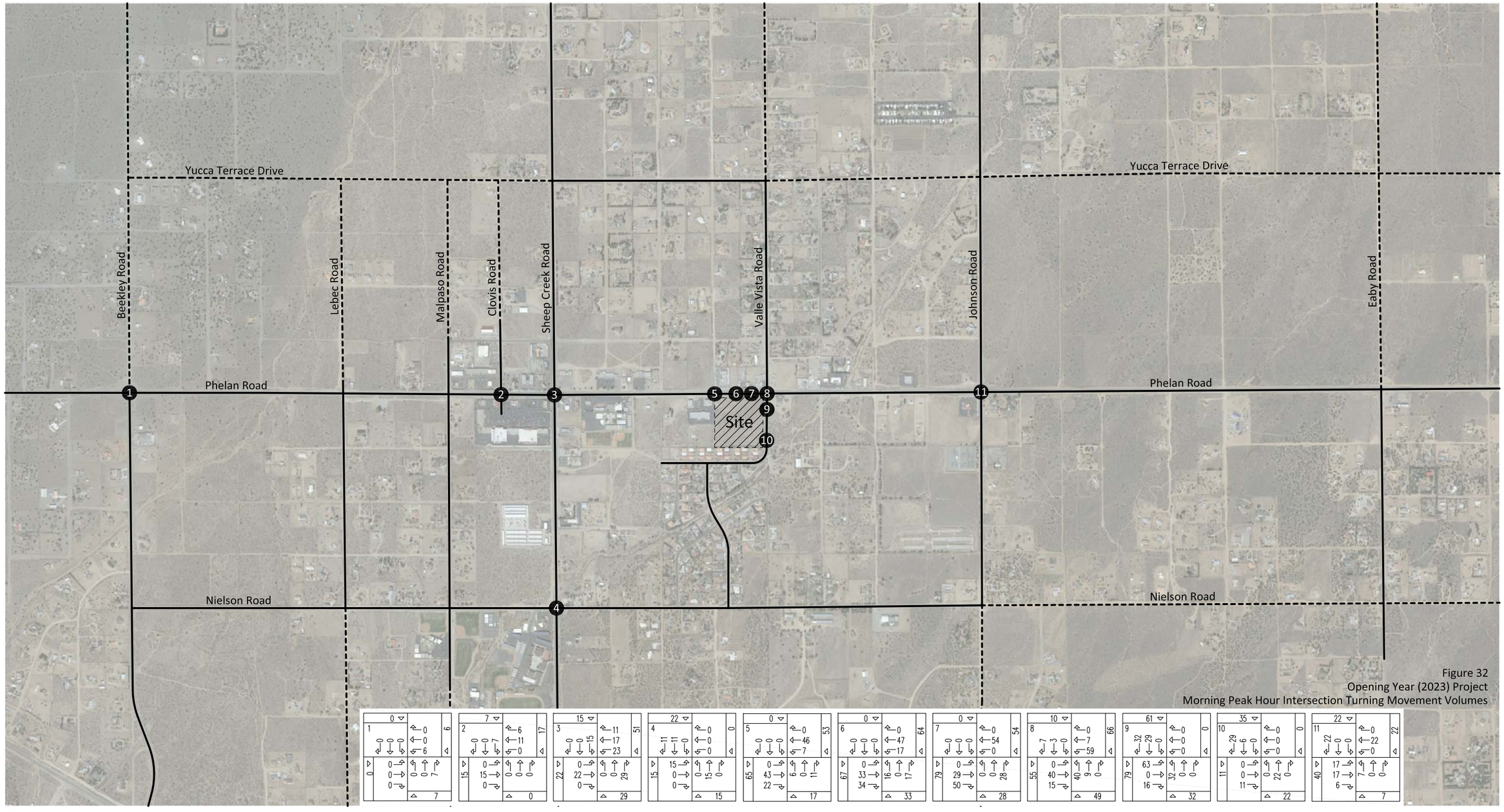


Figure 32
Opening Year (2023) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 33
Opening Year (2023) Project
Evening Peak Hour Intersection Turning Movement Volumes

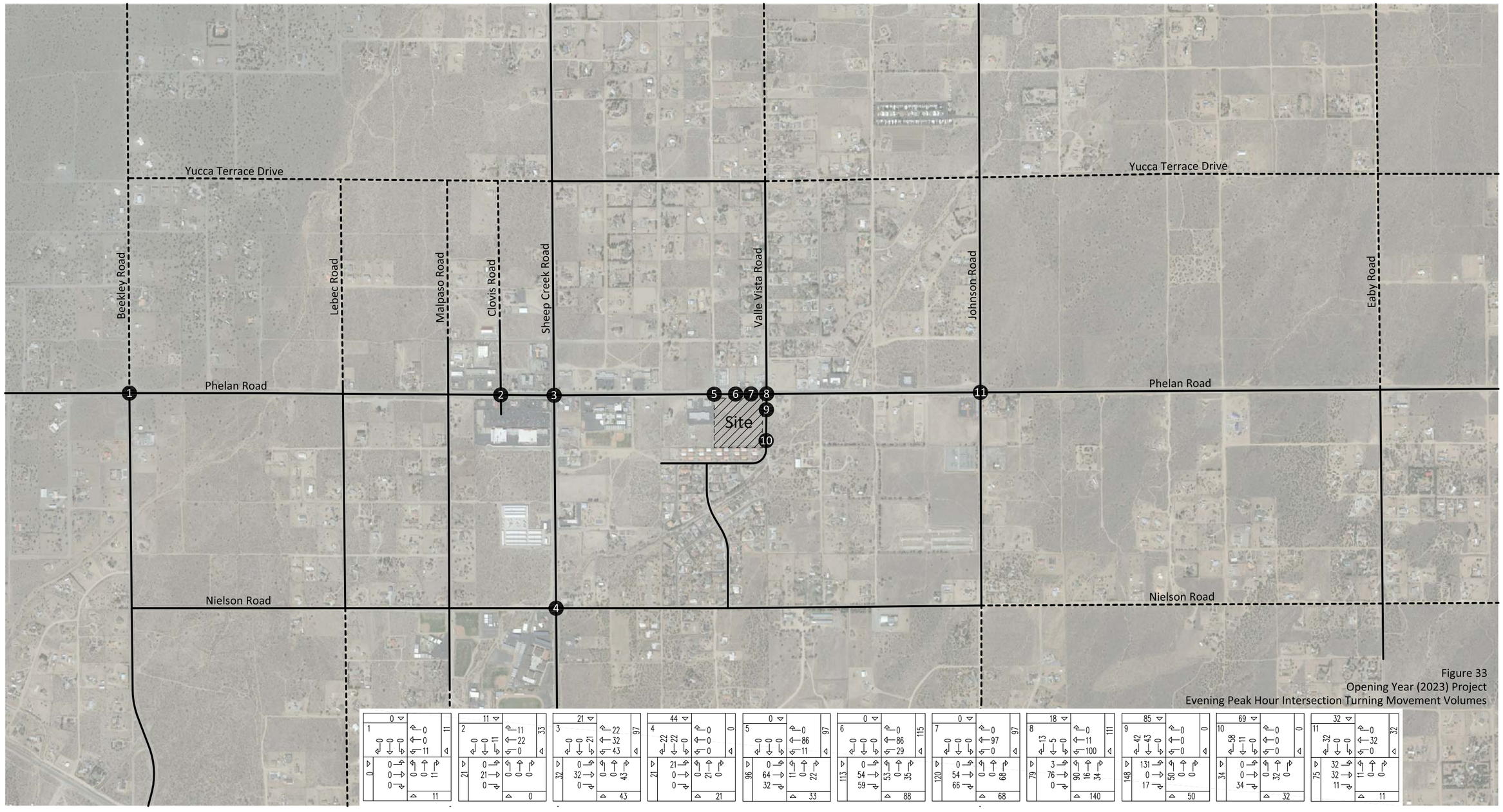


Figure 33
Opening Year (2023) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 34
Opening Year (2024) Project
Morning Peak Hour Intersection Turning Movement Volumes

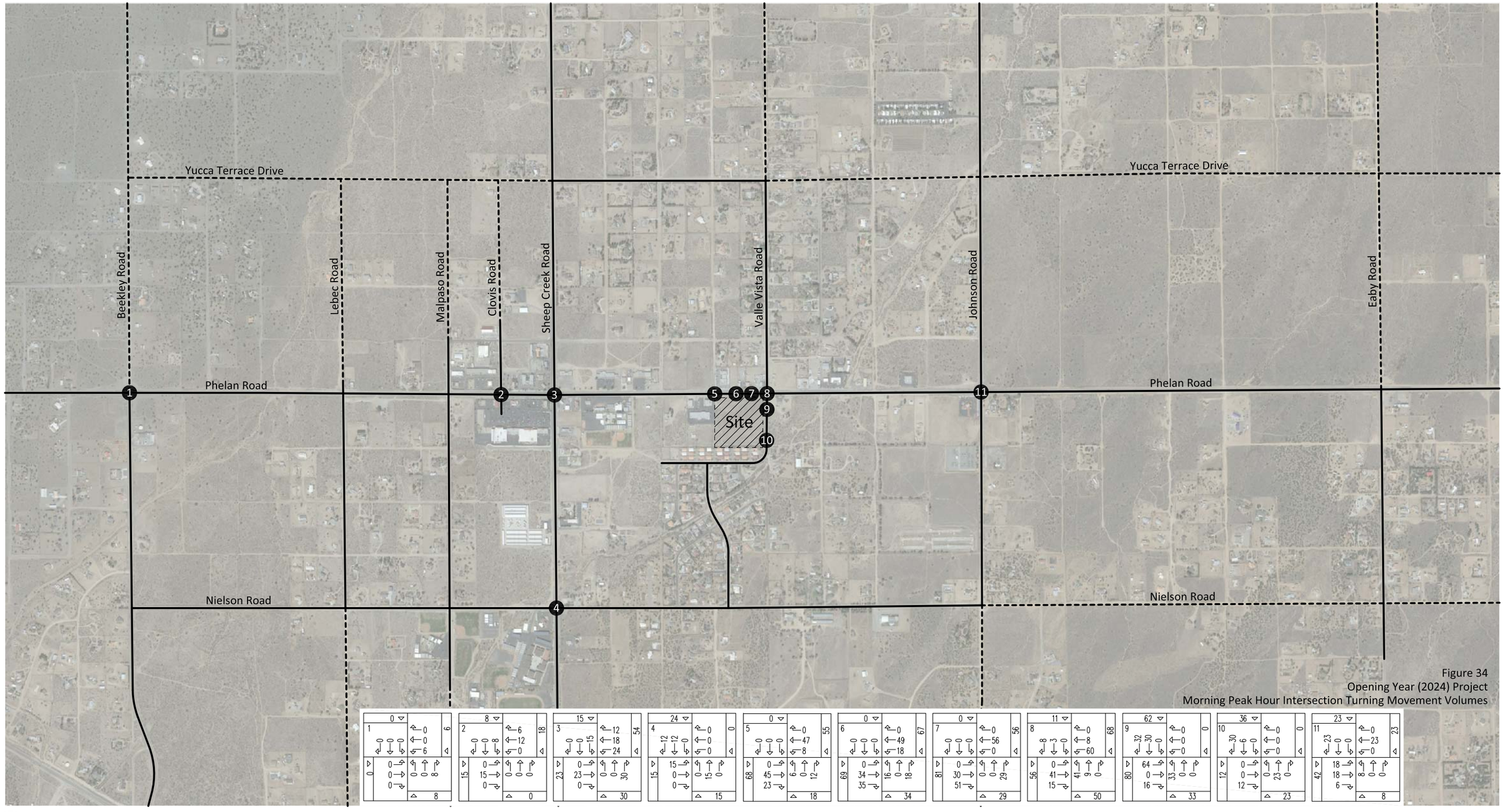


Figure 34
Opening Year (2024) Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 35
Opening Year (2024) Project
Evening Peak Hour Intersection Turning Movement Volumes

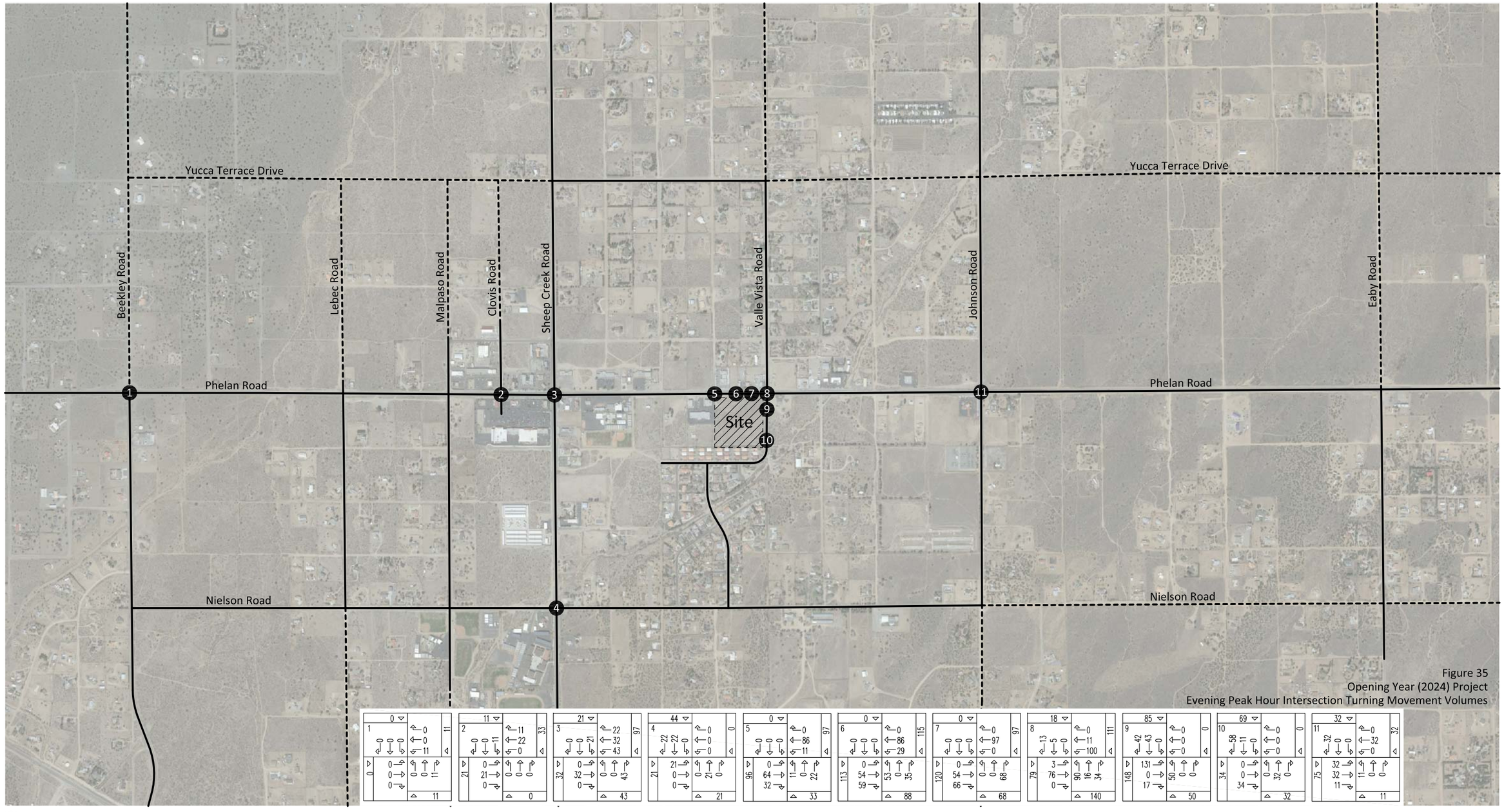


Figure 35
Opening Year (2024) Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 36
Opening Year (2017) Project Traffic Contribution Test Volumes

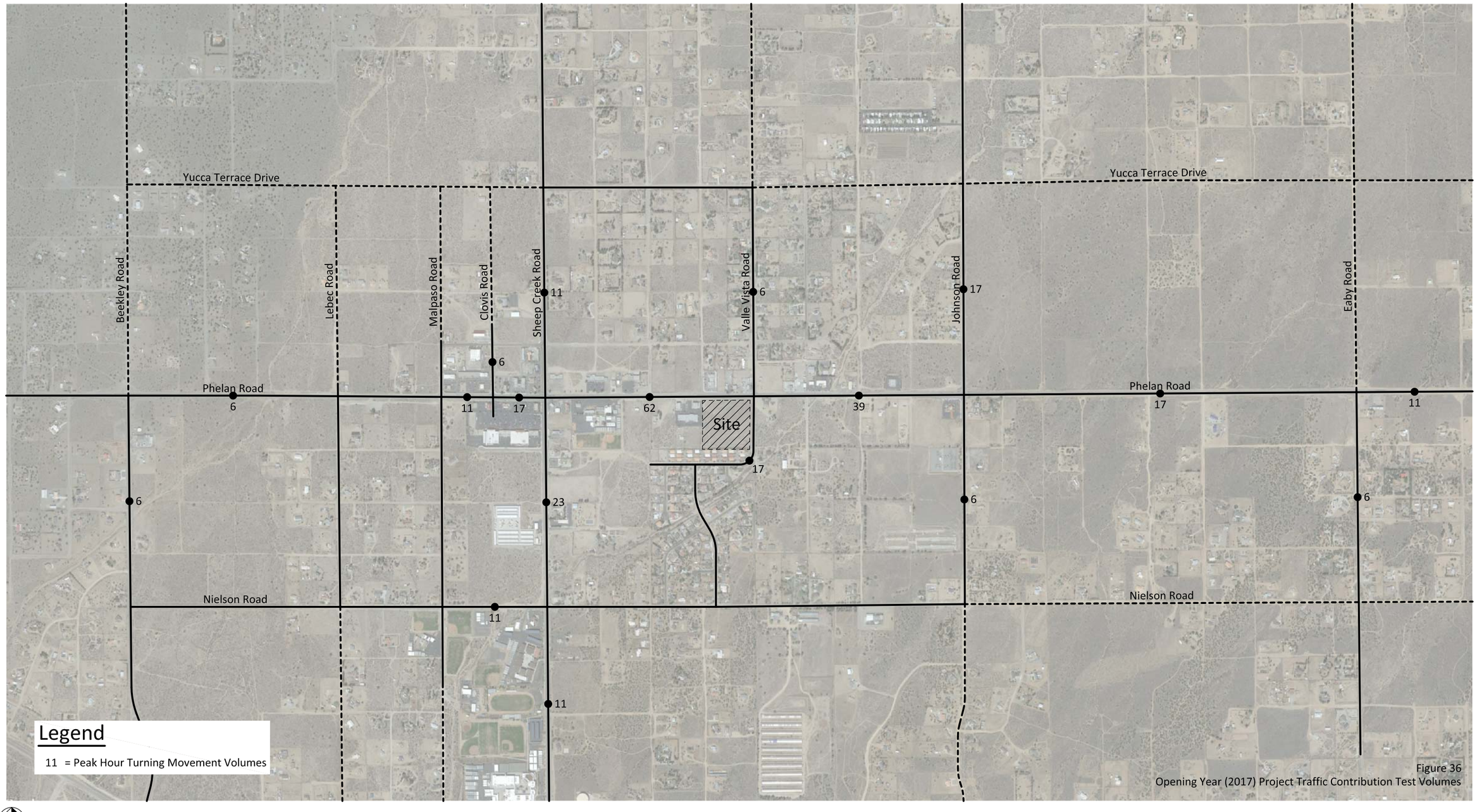


Figure 36
Opening Year (2017) Project Traffic Contribution Test Volumes

Figure 37
Opening Year (2018) Project Traffic Contribution Test Volumes

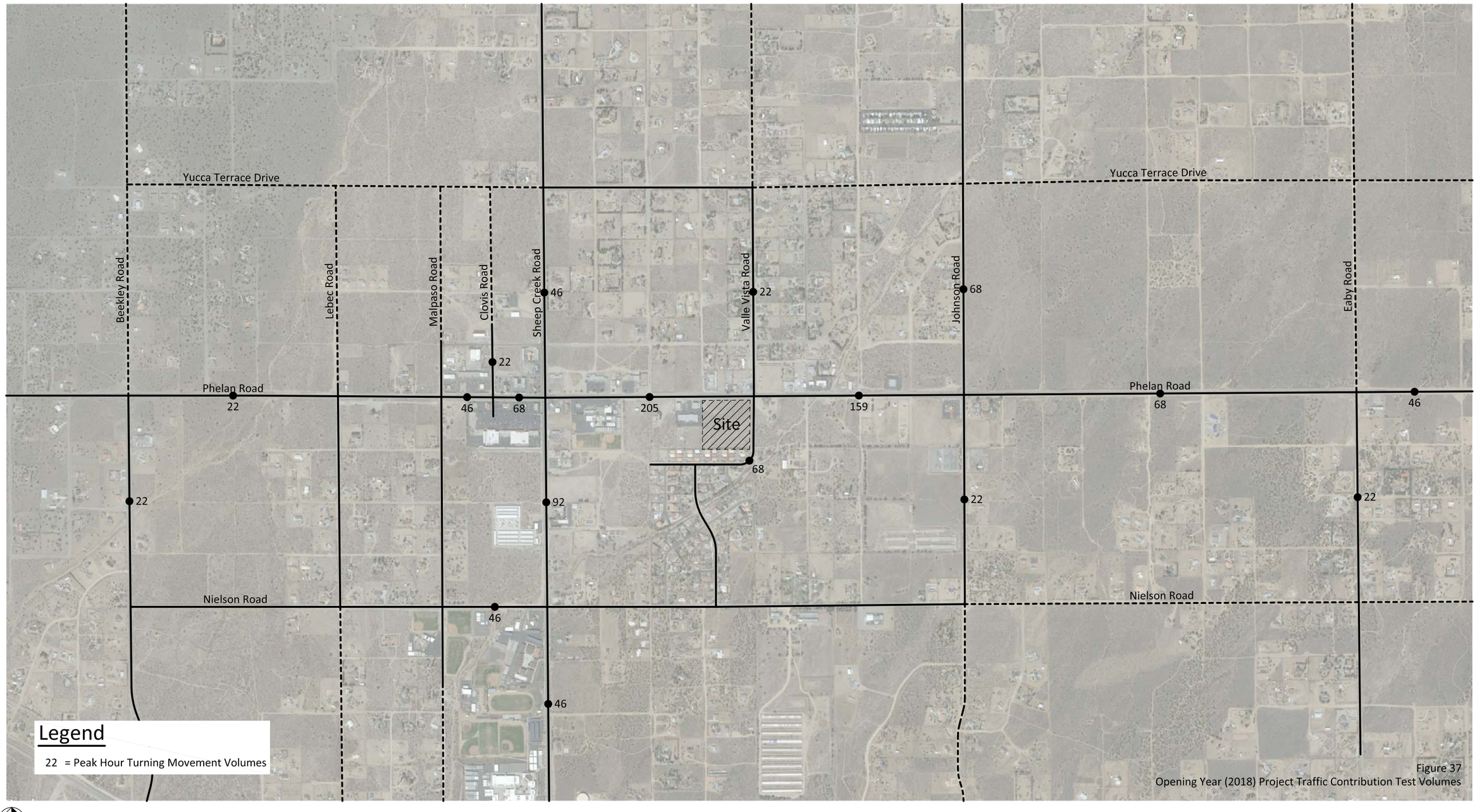


Figure 37
Opening Year (2018) Project Traffic Contribution Test Volumes

IV. FUTURE CONDITIONS

A. Traffic Volume Contributions

1. Method of Projection

To assess Opening Year traffic conditions, project trips are combined with existing traffic, areawide growth, and other development. For this analysis, the Opening Year (2017) traffic volumes include the project related trips for Major A and Shops 1, 100% of the other development trips located at the northwest corner of Sierra Vista and Phelan Roads as well as 50% of the other development trips located at the northeast corner of Sheep Creek and Phelan Roads. The Opening Year (2024) traffic volumes are for 100% of the proposed project and other development volumes.

2. Areawide Growth

To account for areawide growth on roadways, the future without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Horizon Year (2035) peak hour volumes.

3. Other Development (Near Future)

Potential other developments within the study area are included in the analysis if they are not currently built, they are approved, their approval has not expired, and they would contribute trips to the study area intersections. The San Bernardino Transportation Analysis Model, used to determine background traffic, projects traffic volumes based on the projected job/housing table for a particular zone and generates trips at the zone level. Since the model does recognize development on a project or parcel basis, these developments are included to provide a comprehensive analysis for growth augmentation of the San Bernardino Transportation Analysis Model data.

Table 3 lists the proposed land uses for the nearby development (see Figure 38). Table 3 shows the daily and peak hour vehicle trips generated by the other development in the study area. Other development trip distributions are shown on Figures 39 to 42. Opening Year other development average daily traffic volumes are shown on Figures 43 and 44. Opening Year other development morning and evening peak hour turning movement volumes are shown on Figures 45 to 48.

B. Future Volumes

As described within Analysis Methodology Section, the Horizon Year (2035) average daily traffic volume forecasts with the project are developed using a growth increment process based on volumes predicted by the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 traffic models. The growth increment for Horizon Year (2035) on each roadway segment is the increase in traffic model volumes from existing Year 2014 to Year 2035. The final Horizon Year (2035) roadway segment volume used for analysis purposes is

then determined by adding the Horizon Year (2035) growth increment volume to the existing counted volume.

1. Existing Plus Project

   The average daily traffic volumes for Existing Plus Project traffic conditions have been determined. Existing Plus Project average daily traffic volumes are shown on Figure 49.

2. Opening Year (2017) Without and With Project

   The average daily traffic volumes for Opening Year (2017) traffic conditions have been determined as described above using the growth interpolation process for background traffic and is combined other development traffic. Opening Year (2017) Without and With Project average daily traffic volumes are shown on Figure 50.

3. Opening Year (2018) Without and With Project

   The average daily traffic volumes for Opening Year (2018) traffic conditions have been determined as described above using the growth interpolation process for background traffic and is combined other development traffic. Opening Year (2018) Without and With Project average daily traffic volumes are shown on Figure 51.

4. Opening Year (2019) Without and With Project

   The average daily traffic volumes for Opening Year (2019) traffic conditions have been determined as described above using the growth interpolation process for background traffic and is combined other development traffic. Opening Year (2019) Without and With Project average daily traffic volumes are shown on Figure 52.

5. Opening Year (2020) Without and With Project

   The average daily traffic volumes for Opening Year (2020) traffic conditions have been determined as described above using the growth interpolation process for background traffic and is combined other development traffic. Opening Year (2020) Without and With Project average daily traffic volumes are shown on Figure 53.

6. Opening Year (2021) Without and With Project

   The average daily traffic volumes for Opening Year (2021) traffic conditions have been determined as described above using the growth interpolation process for background traffic and is combined other development traffic. Opening Year (2021) Without and With Project average daily traffic volumes are shown on Figure 54.

7. Opening Year (2022) Without and With Project

   The average daily traffic volumes for Opening Year (2022) traffic conditions have been determined as described above using the growth interpolation process for

background traffic and is combined other development traffic. Opening Year (2022) Without and With Project average daily traffic volumes are shown on Figure 55.

8. Opening Year (2023) Without and With Project

The average daily traffic volumes for Opening Year (2022) traffic conditions have been determined as described above using the growth interpolation process for background traffic and is combined other development traffic. Opening Year (2022) Without and With Project average daily traffic volumes are shown on Figure 56.

9. Opening Year (2024) Without and With Project

The average daily traffic volumes for Opening Year (2024) traffic conditions have been determined as described above using the growth interpolation process for background traffic and is combined other development traffic. Opening Year (2024) Without and With Project average daily traffic volumes are shown on Figure 57.

10. Horizon Year (2035) Without and With Project

The average daily traffic volumes for Horizon Year (2035) traffic conditions have been determined as described above using the growth increment process for background traffic and is combined other development traffic. Horizon Year (2035) Without and With Project average daily traffic volumes are shown on Figure 58.

C. Future Level of Service

Study area intersection delay and level of service values are shown based on existing geometrics (without improvement) and with improvements when the intersection level of service falls below the Level of Service threshold set by the County of San Bernardino. The Existing Plus Project traffic operations analysis is summarized in Table 4. Morning and evening peak hour traffic operations analysis are summarized in Tables 5 to 22 for Opening Year (2017), Opening Year (2018), Opening Year (2019), Opening Year (2020), Opening Year (2021), Opening Year (2022), Opening Year (2034), Opening Year (2024), and the Horizon Year (2035) traffic conditions. Intersection delay calculation worksheets for the various traffic conditions are provided in Appendix F.

1. Existing Plus Project

The Existing Plus Project delay and Level of Service for the study area intersections are shown in Table 4. Table 4 shows delay values based on the geometrics at the study area intersections without and with improvements. Existing Plus Project morning and evening peak hour intersection turning movement volumes are shown on Figures 59 and 60, respectively.

For Existing Plus Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the

following study area intersections are projected to operate at Level of Service D[3] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

Intersection delay calculation worksheets for the various traffic conditions are provided in Appendix F.

2. Opening Year (2017) Without Project

The Opening Year (2017) delay and Level of Service for the study area intersections without the proposed project are shown in Table 5. Table 5 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2017) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 61 and 62, respectively.

For Opening Year (2017) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service D[3] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2017) without project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to continue to operate at Level of Service D during the evening peak hour, without improvements.

3. Opening Year (2017) With Project

The Opening Year (2017) delay and Level of Service for the study area intersections with the proposed project are shown in Table 6. Table 6 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2017) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 63 and 64, respectively.

For Opening Year (2017) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service D[3] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

[3] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

For Opening Year (2017) with project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to continue to operate at Level of Service D during the evening peak hour, without improvements. Project generated trips did not result in a significant impact at these intersections as it is projected to not deteriorate the previously existing without project Levels of Service.

4. Opening Year (2018) Without Project

The Opening Year (2018) delay and Level of Service for the study area intersections without the proposed project are shown in Table 7. Table 7 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2018) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 65 and 66, respectively.

For Opening Year (2018) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[4] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2018) without project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to operate within acceptable Levels of Service during the peak hours, with improvements. Phased project improvements would maintain the existing Level of Service D.

5. Opening Year (2018) With Project

The Opening Year (2018) delay and Level of Service for the study area intersections with the proposed project are shown in Table 8. Table 8 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2018) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 67 and 68, respectively.

For Opening Year (2018) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[4] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

[4] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

For Opening Year (2018) without project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to operate within acceptable Levels of Service during the peak hours, with improvements. Phased project improvements would maintain the existing Level of Service D.

6. Opening Year (2019) Without Project

The Opening Year (2019) delay and Level of Service for the study area intersections without the proposed project are shown in Table 9. Table 9 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2019) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 69 and 70, respectively.

For Opening Year (2019) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[5] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2019) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

7. Opening Year (2019) With Project

The Opening Year (2019) delay and Level of Service for the study area intersections with the proposed project are shown in Table 10. Table 10 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2019) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 71 and 72, respectively.

For Opening Year (2019) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[5] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2019) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

[5] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

8. Opening Year (2020) Without Project

The Opening Year (2020) delay and Level of Service for the study area intersections without the proposed project are shown in Table 11. Table 11 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2020) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 73 and 74, respectively.

For Opening Year (2020) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[6] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2020) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

9. Opening Year (2020) With Project

The Opening Year (2020) delay and Level of Service for the study area intersections with the proposed project are shown in Table 12. Table 12 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2020) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 75 and 76, respectively.

For Opening Year (2020) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[6] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2020) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

[6] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

10. Opening Year (2021) Without Project

The Opening Year (2021) delay and Level of Service for the study area intersections without the proposed project are shown in Table 13. Table 13 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2021) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 77 and 78, respectively.

For Opening Year (2021) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[7] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2021) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

11. Opening Year (2021) With Project

The Opening Year (2021) delay and Level of Service for the study area intersections with the proposed project are shown in Table 14. Table 14 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2021) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 79 and 80, respectively.

For Opening Year (2021) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[7] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2021) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

[7] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

12. Opening Year (2022) Without Project

The Opening Year (2022) delay and Level of Service for the study area intersections without the proposed project are shown in Table 15. Table 15 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2022) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 81 and 82, respectively.

For Opening Year (2022) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[8] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2022) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

13. Opening Year (2022) With Project

The Opening Year (2022) delay and Level of Service for the study area intersections with the proposed project are shown in Table 16. Table 16 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2022) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 83 and 84, respectively.

For Opening Year (2022) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[8] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2022) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

[8] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

14. Opening Year (2023) Without Project

The Opening Year (2023) delay and Level of Service for the study area intersections without the proposed project are shown in Table 17. Table 17 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2023) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 85 and 86, respectively.

For Opening Year (2023) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[9] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2023) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

15. Opening Year (2023) With Project

The Opening Year (2023) delay and Level of Service for the study area intersections with the proposed project are shown in Table 18. Table 18 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2023) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 87 and 88, respectively.

For Opening Year (2023) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[9] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2023) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

[9] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

16. Opening Year (2024) Without Project

The Opening Year (2024) delay and Level of Service for the study area intersections without the proposed project are shown in Table 19. Table 19 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2024) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 89 and 90, respectively.

For Opening Year (2024) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[10] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2024) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

17. Opening Year (2024) With Project

The Opening Year (2024) delay and Level of Service for the study area intersections with the proposed project are shown in Table 20. Table 20 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2024) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 91 and 92, respectively.

For Opening Year (2024) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[10] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2024) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

[10] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

18. Horizon Year (2035) Without Project

The Horizon Year (2035) delay and Level of Service for the study area intersections without the proposed project are shown in Table 21. Table 21 shows delay values based on the geometrics at the study area intersections without and with improvements. Horizon Year (2035) without project morning and evening peak hour intersection turning movement volumes are shown on Figures 93 and 94, respectively.

For Horizon Year (2035) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service D toF during the peak hours, without improvements:

Clovis Road (NS) at:
Phelan Road (EW) - #2[11]

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Horizon Year (2035) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

19. Horizon Year (2035) With Project

The Horizon Year (2035) delay and Level of Service for the study area intersections with the proposed project are shown in Table 22. Table 22 shows delay values based on the geometrics at the study area intersections without and with improvements. Horizon Year (2035) with project delay calculation worksheets are provided in Appendix F. Horizon Year (2035) with project morning and evening peak hour intersection turning movement volumes are shown on Figures 95 and 96, respectively.

For Horizon Year (2035) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service D to F during the peak hours, without improvements:

Clovis Road (NS) at:
Phelan Road (EW) - #2[11]

[11] Per the Highway Capacity Manual, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown for intersections with stop control. The minor private commercial driveway has Level of Service D. However, the major public roadway (Phelan Road) and the minor public roadway (Clovis Road) have Levels of Service A and C respectively.

Sierra Vista Road (NS) at:
Phelan Road (EW) - #5

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Horizon Year (2035) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

D. Future Traffic Signal Warrant Analysis

A traffic signal is projected to be warranted at the following additional study area intersection for Opening Year (2019) With Project traffic conditions (see Appendix G):

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

The unsignalized intersection has been evaluated for a traffic signal using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California Manual of Uniform Traffic Control Devices (November 2014).

Table 3

Other Development Trip Generation

Number	Project	Quantity	Units[2]	Peak Hour						Daily
				Morning			Evening			
				Inbound	Outbound	Total	Inbound	Outbound	Total	
1	Shopping Center (APN: 3066-121-03, -62, -63)[1]	19.882	TSF	41	32	73	106	113	219	2,385
2	Retail (NWC Sierra Vista Road Phelan Road)[2]	9.100	TSF	21	14	35	31	31	62	583

[1] Source: NEC of Sheep Creek Road and Phelan Road Traffic Impact Analysis, 2008, by RK Engineering Group, Inc.

[1] Source: Dollar General Phelan Project Traffic Impact Analysis, January 21, 2016, by Kunzman Associates, Inc..

[3] TSF = Thousand Square Feet

Table 4

Existing Plus Project Intersection Delay and Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.0-B	10.1-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.1-C	33.3-D
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	14.1-B	21.6-C
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.8-C	30.4-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	9.3-A	8.1-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	22.1-C	21.3-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[4]	1	**1**	1[4]	1	0	14.4-B	20.9-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	11.8-B	15.0-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	57.6-F	99.9-F[5]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	14.8-B	22.8-C
EN Driveway (EW) - #9	SB County	**CSS**	0.5	0.5	0	0	0.5	0.5	0	**1**	0	0	0	0	10.1-B	11.6-B
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	0.5	0.5	0	0	**1**	0	0	0	8.6-A	8.8-A
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.9-C	25.7-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Table 5

Opening Year (2017) Without Project Intersection Levels of Service Phase 1

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	11.9-B	10.6-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.1-C	34.2-D
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	14.1-B	22.1-C
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	28.9-C	28.7-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.8-A	8.0-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	18.8-C	19.0-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County	CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	21.4-C	32.8-D
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.6-C	25.3-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 6

Opening Year (2017) With Project Intersection Levels of Service Phase 1

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	11.9-B	10.7-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.2-C	35.4-E
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	14.2-B	22.6-C
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.5-C	29.3-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.8-A	8.0-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	19.2-C	20.8-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[5]	1	**1**	1[5]	1	0	13.8-B	17.6-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	-	-
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County	CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	21.8-C	34.8-D
EN Driveway (EW) - #9	SB County	**CSS**	0	1	0	0	1	0	0	**1**	0	0	0	0	8.7-A	9.0-A
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	1	0	0	0	**1**	0	0	0	-	-
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.6-C	25.5-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] CSS-**R** = Cross street stop lane restricts implemented to improve level of service.

[5] Existing Two-Way Left Turn Lane.

Table 7

Opening Year (2018) Without Project Intersection Levels of Service Phase 2

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	11.7-B	10.5-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.7-C	38.2-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.1-C	28.9-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.8-A	8.0-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	19.1-C	19.5-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	22.2-C	36.2-E
With Improvements		CSS	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	20.4-C	34.1-D
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.6-C	25.4-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 8

Opening Year (2018) With Project Intersection Levels of Service Phase 2

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	11.7-B	10.7-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.9-C	40.3-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.6-C	29.8-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.8-A	8.0-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	19.7-C	22.2-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[5]	1	**1**	1[5]	1	0	14.2-B	19.2-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	-	-
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	23.2-C	40.8-E
With Improvements		CSS	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	21.0-C	34.2-D
EN Driveway (EW) - #9	SB County	**CSS**	0	1	0	0	1	0	0	**1**	0	0	0	0	8.8-A	9.2-A
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	1	0	0	0	**1**	0	0	0	-	-
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.6-C	25.7-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] CSS-**R** = Cross street stop lane restricts implemented to improve level of service.

[5] Existing Two-Way Left Turn Lane.

Table 9

Opening Year (2019) Without Project Intersection Levels of Service Phase 3

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	11.9-B	10.6-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.7-C	39.1-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.4-C	29.0-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.7-A	8.0-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	19.4-C	19.6-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	22.7-C	37.5-E
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	13.5-B	14.1-B
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.8-C	25.5-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 10

Opening Year (2019) With Project Intersection Levels of Service Phase 2

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.0-B	10.8-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	18.0-C	41.9-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.9-C	30.1-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.7-A	8.1-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	20.5-C	23.2-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[5]	1	**1**	1[5]	1	0	14.6-B	19.7-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	-	-
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	24.8-C	50.0-E
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	13.8-B	15.1-B
EN Driveway (EW) - #9	SB County	**CSS**	0	1	0	0	1	0	0	**1**	0	0	0	0	8.9-A	9.4-A
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	1	0	0	0	**1**	0	0	0	-	-
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.8-C	25.8-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] CSS-**R** = Cross street stop lane restricts implemented to improve level of service.

[5] Existing Two-Way Left Turn Lane.

Table 11

Opening Year (2020) Without Project Intersection Levels of Service Phase 4

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	11.9-B	10.8-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.7-C	39.1-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.4-C	29.1-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.8-A	8.1-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	19.6-C	19.7-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	24.3-C	40.5-E
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	13.6-B	14.2-B
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.8-C	25.5-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 12

Opening Year (2020) With Project Intersection Levels of Service Phase 4

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.0-B	11.0-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	18.1-C	43.1-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	30.8-C	30.7-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	9.3-A	8.1-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	20.7-C	22.0-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[4]	1	**1**	1[4]	1	0	15.1-C	19.8-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	11.8-B	14.8-B
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	39.6-E	99.9-F[5]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	14.9-B	17.0-B
EN Driveway (EW) - #9	SB County	**CSS**	0.5	0.5	0	0	0.5	0.5	0	**1**	0	0	0	0	9.7-A	10.6-B
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	0.5	0.5	0	0	**1**	0	0	0	-	-
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	27.5-C	25.9-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Table 13

Opening Year (2021) Without Project Intersection Levels of Service Phase 5

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.0-B	10.8-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.7-C	40.6-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	29.8-C	29.2-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.9-A	8.1-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	19.6-C	19.7-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	24.4-C	38.4-E
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	13.8-B	15.7-B
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.8-C	25.6-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 14

Opening Year (2021) With Project Intersection Levels of Service Phase 5

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.2-B	11.1-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	18.1-C	45.6-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	31.2-C	31.1-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	9.5-A	8.2-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	21.0-C	22.5-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[4]	1	**1**	1[4]	1	0	15.2-C	20.4-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	11.8-B	15.0-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	48.9-E	99.9-F[5]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	15.1-B	17.4-B
EN Driveway (EW) - #9	SB County	**CSS**	0.5	0.5	0	0	0.5	0.5	0	**1**	0	0	0	0	9.9-A	11.0-B
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	1	0	0	0	**1**	0	0	0	-	-
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	26.0-C	26.2-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Table 15

Opening Year (2022) Without Project Intersection Delay and Levels of Service Phase 6

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.1-B	10.8-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.8-C	40.6-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	30.0-C	29.4-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.9-A	8.1-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	19.8-C	20.0-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	24.9-C	43.1-E
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	13.9-B	15.7-B
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.9-C	25.6-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 16

Opening Year (2022) With Project Intersection Levels of Service Phase 6

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.3-B	11.1-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	18.3-C	46.3-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	31.1-C	31.7-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	9.4-A	8.2-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	21.3-C	23.6-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[4]	1	**1**	1[4]	1	0	13.1-B	20.8-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	11.9-B	15.5-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	65.1-F	99.9-F[5]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	15.3-B	22.1-C
EN Driveway (EW) - #9	SB County	**CSS**	0.5	0.5	0	0	0.5	0.5	0	**1**	0	0	0	0	10.0-B	11.5-B
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	0.5	0.5	0	0	**1**	0	0	0	8.7-A	8.9-A
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	26.0-C	26.3-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Table 17

Opening Year (2023) Without Project Intersection Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.1-B	11.1-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.9-C	40.6-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	30.2-C	29.7-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.9-A	8.1-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	20.0-C	20.0-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	25.4-D	44.9-E
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	13.9-B	15.8-B
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	25.9-C	25.7-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 18

Opening Year (2023) With Project Intersection Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.3-B	11.5-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	18.6-C	47.6-E
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	32.0-C	32.9-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	9.4-A	8.2-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	22.2-C	24.4-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[4]	1	**1**	1[4]	1	0	15.3-C	24.1-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	12.0-B	16.9-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	99.9-F	99.9-F[5]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	15.8-B	19.3-B
EN Driveway (EW) - #9	SB County	**CSS**	0.5	0.5	0	0	0.5	0.5	0	**1**	0	0	0	0	10.4-B	12.0-B
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	0.5	0.5	0	0	**1**	0	0	0	8.7-A	8.9-A
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	26.1-C	26.8-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Table 19

Opening Year (2024) Without Project Intersection Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.1-B	11.1-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	17.9-C	41.0-E
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	14.3-B	23.9-C
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	30.3-C	29.7-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.9-A	8.2-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	20.2-C	20.2-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	27.7-D	43.8-E
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	14.0-B	15.8-B
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	26.9-C	25.8-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

Table 20

Opening Year (2024) With Project Intersection Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.4-B	11.5-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	18.7-C	48.5-E
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	15.6-B	25.0-C
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	32.2-C	32.3-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	9.5-A	8.3-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County	CSS	0	1	0	0	1	0	1[4]	1	**1**	1[4]	1	1	22.6-C	25.0-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[4]	1	**1**	1[4]	1	0	15.4-C	24.7-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	12.0-B	17.0-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	99.1-F	99.9-F[5]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	15.9-B	19.6-B
EN Driveway (EW) - #9	SB County	**CSS**	0.5	0.5	0	0	0.5	0.5	0	**1**	0	0	0	0	10.6-B	12.2-B
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	0.5	0.5	0	0	**1**	0	0	0	8.8-A	8.9-A
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	28.3-C	26.9-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Table 21

Year 2035 Without Project Intersection Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	12.8-B	11.9-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	19.0-C	47.4-E
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	12.9-B	27.3-D
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	33.2-C	32.1-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	8.9-A	8.4-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1[4]	1	d	1[4]	1	1	23.1-C	22.2-C
With Improvements		CSS	0	1	0	0	1	0	1[4]	**1.5**	**0.5**	1[4]	1	1	20.6-C	19.9-B
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	40.7-E	99.9-F[5]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	14.3-B	19.6-C
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	27.9-C	26.9-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Table 22

Year 2035 With Project Intersection Levels of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Beekley Road (NS) at:																
Phelan Road (EW) - #1	SB County	TS	0.5	0.5	d	0.5	0.5	d	1	1	1	1	0.5	0.5	13.4-B	13.0-B
Clovis Road (NS) at:																
Phelan Road (EW) - #2	SB County	CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	19.9-C	57.1-F
With Platooning Analysis		CSS	0	1	0	1	0.5	0.5	1	2	d	1	2	d	13.3-B	30.9-D
Sheep Creek Road (NS) at:																
Phelan Road (EW) - #3	SB County	TS	1	2	d	1	2	d	1	2	d	1	1.5	0.5	34.2-C	33.8-C
Nielson Road (EW) - #4	SB County	TS	1	1	1	1	1	d	0.5	0.5	d	0	1	0	9.3-A	8.5-A
NW Driveway (NS) at:																
Phelan Road (EW) - #5	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1[6]	1	**1**	1[6]	1	1	26.0-D	27.5-D
With Improvements		CSS	0	1	0	0	1	0	1[6]	**1.5**	**0.5**	1[6]	1	1	22.5-C	21.8-C
N Driveway (NS) at:																
Phelan Road (EW) - #6	SB County	**CSS**	0	**1**	0	0	0	0	1[6]	1	**1**	1[6]	1	0	16.4-C	24.8-C
NE Driveway (NS) at:																
Phelan Road (EW) - #7	SB County	**CSS**	0	0	**1**	0	0	0	0	1	**1**	0	1	0	12.2-B	18.6-C
Valle Vista Road (NS) at:																
Phelan Road (EW) - #8	SB County															
Without Improvements		CSS	0	1	0	0	1	0	1	1	d	1	0.5	0.5	99.9-F	99.9-F[7]
With Improvements		**TS**	**1**	0.5	0.5	**1**	0.5	0.5	1	1	d	1	1	**1**	15.9-B	19.7-B
EN Driveway (EW) - #9	SB County	**CSS**	0.5	0.5	0	0	0.5	0.5	0	**1**	0	0	0	0	10.9-B	13.5-B
ES Driveway (EW) - #10	SB County	**CSS**	0	1	0	0	0.5	0.5	0	0	**1**	0	0	0	8.9-A	9.0-A
Johnson Road (NS) at:																
Phelan Road (EW) - #11	SB County	TS	1	1	d	1	1	1	1	2	1	1	2	d	28.1-C	28.0-C

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; **Bold** = Improvements.

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] Existing Two-Way Left Turn Lane.

[5] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

Figure 38
Other Development Location Map

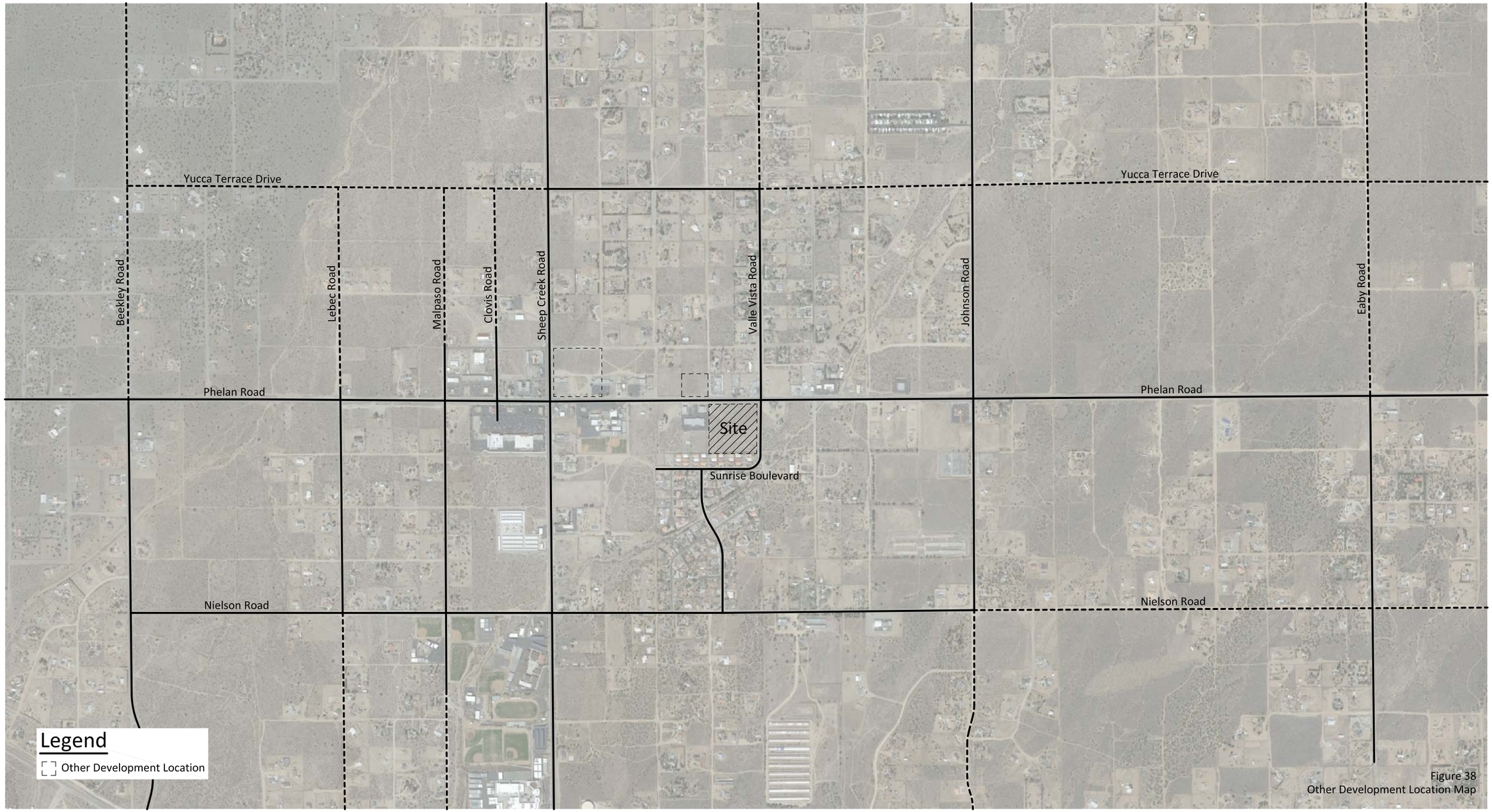


Figure 39
Other Development Outbound Trip Distribution - 1

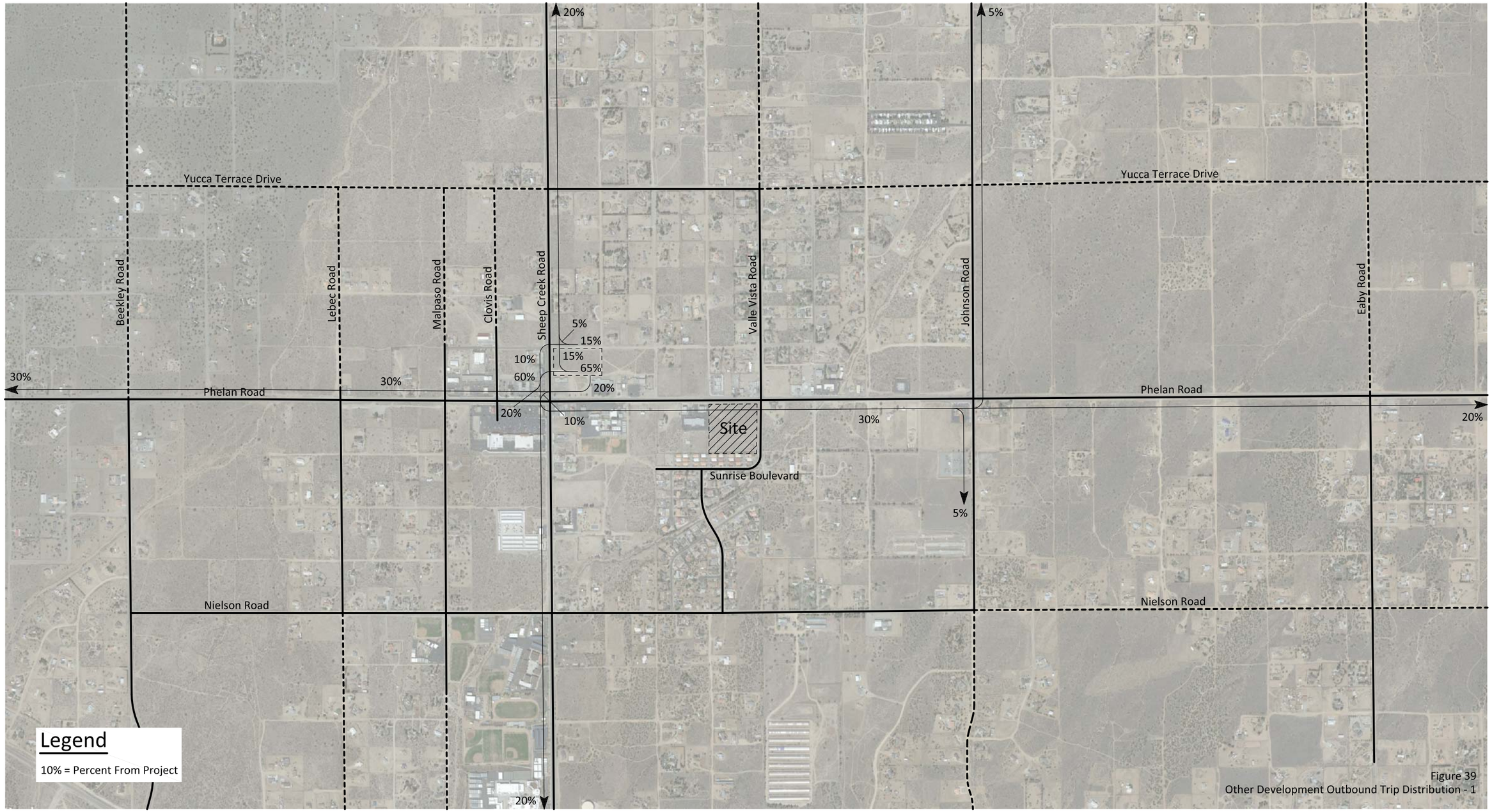


Figure 39
Other Development Outbound Trip Distribution - 1

Figure 40
Other Development Inbound Trip Distribution - 1

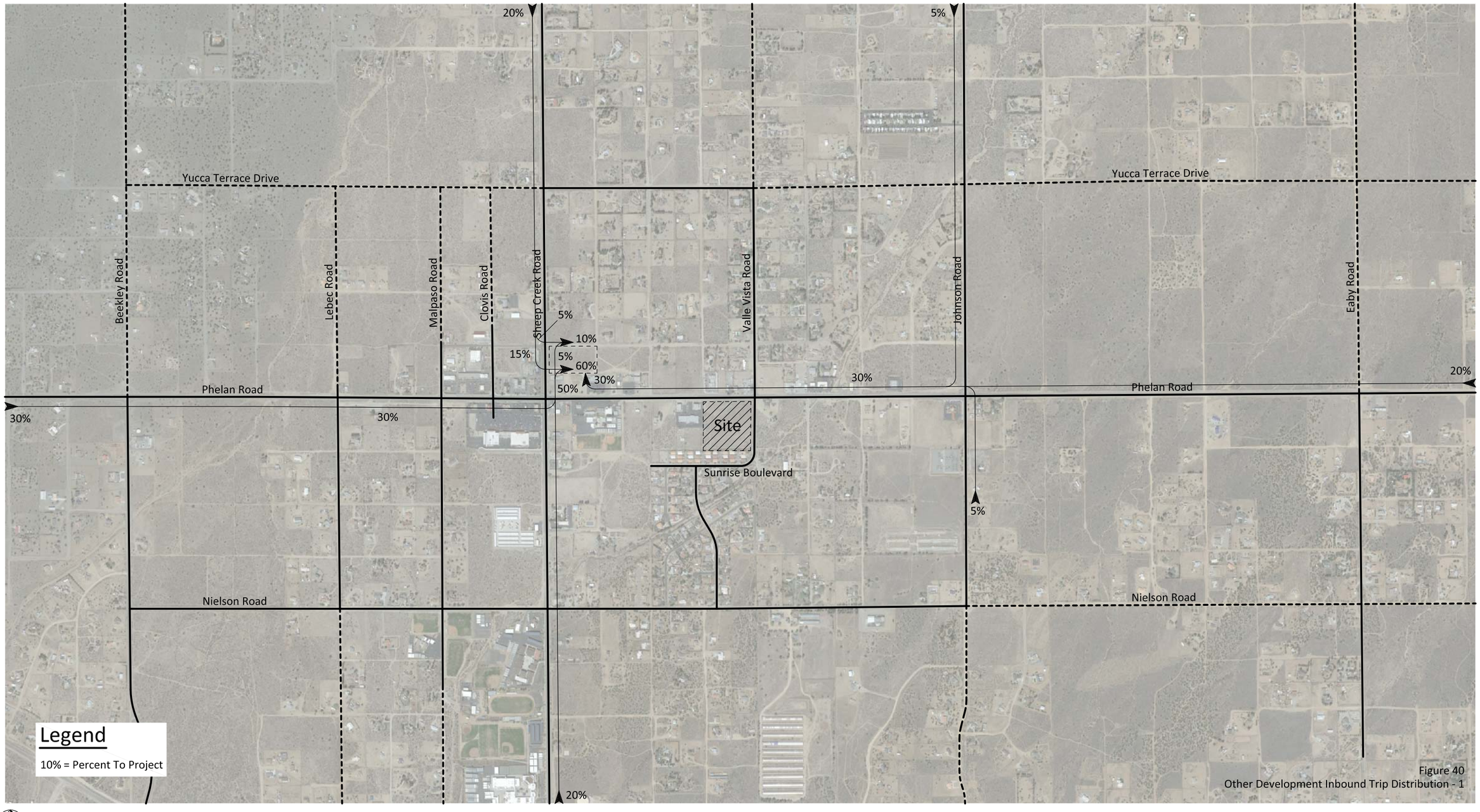


Figure 41
Other Development Outbound Trip Distribution - 2

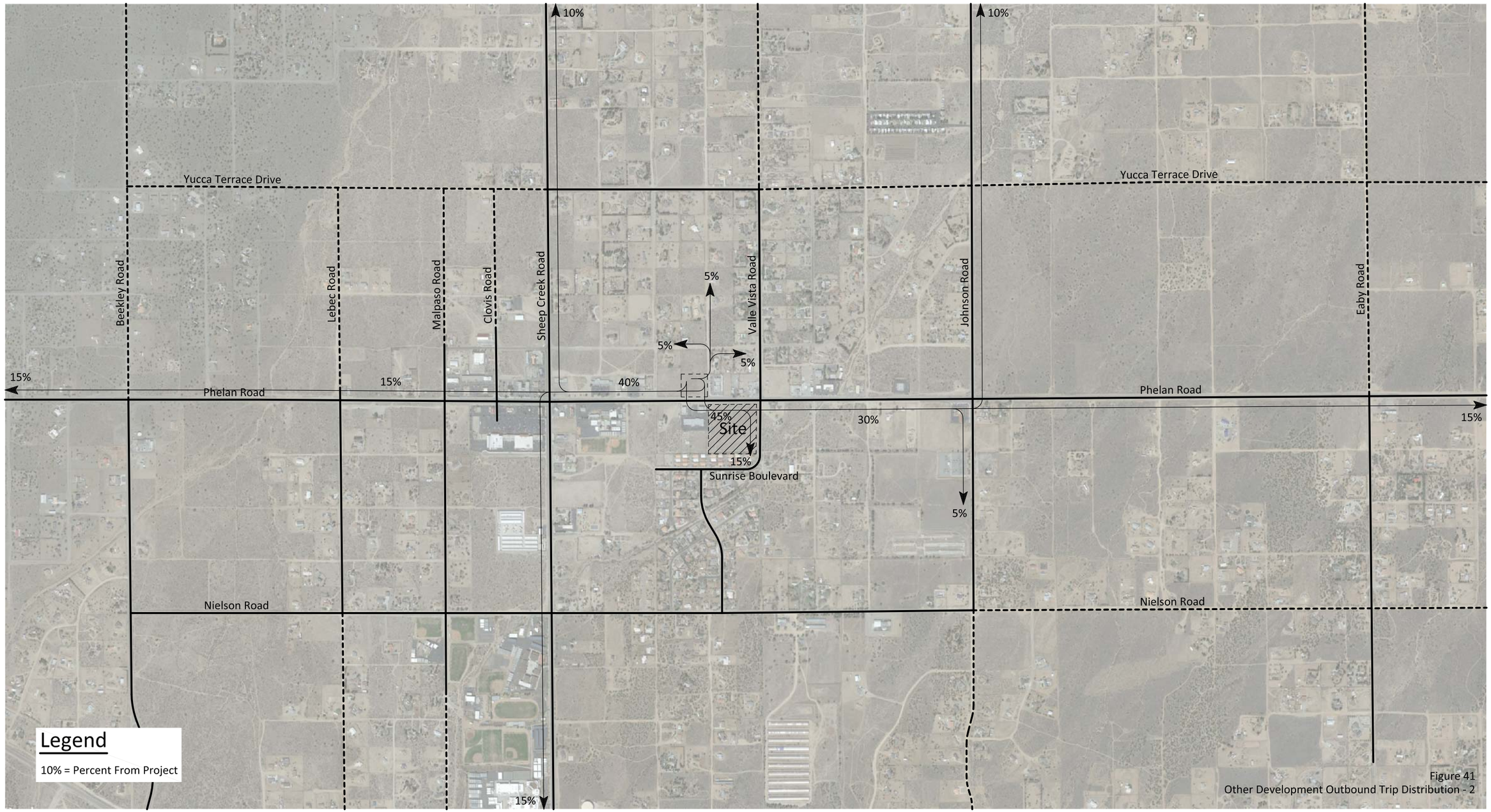


Figure 42
Other Development Inbound Trip Distribution - 2

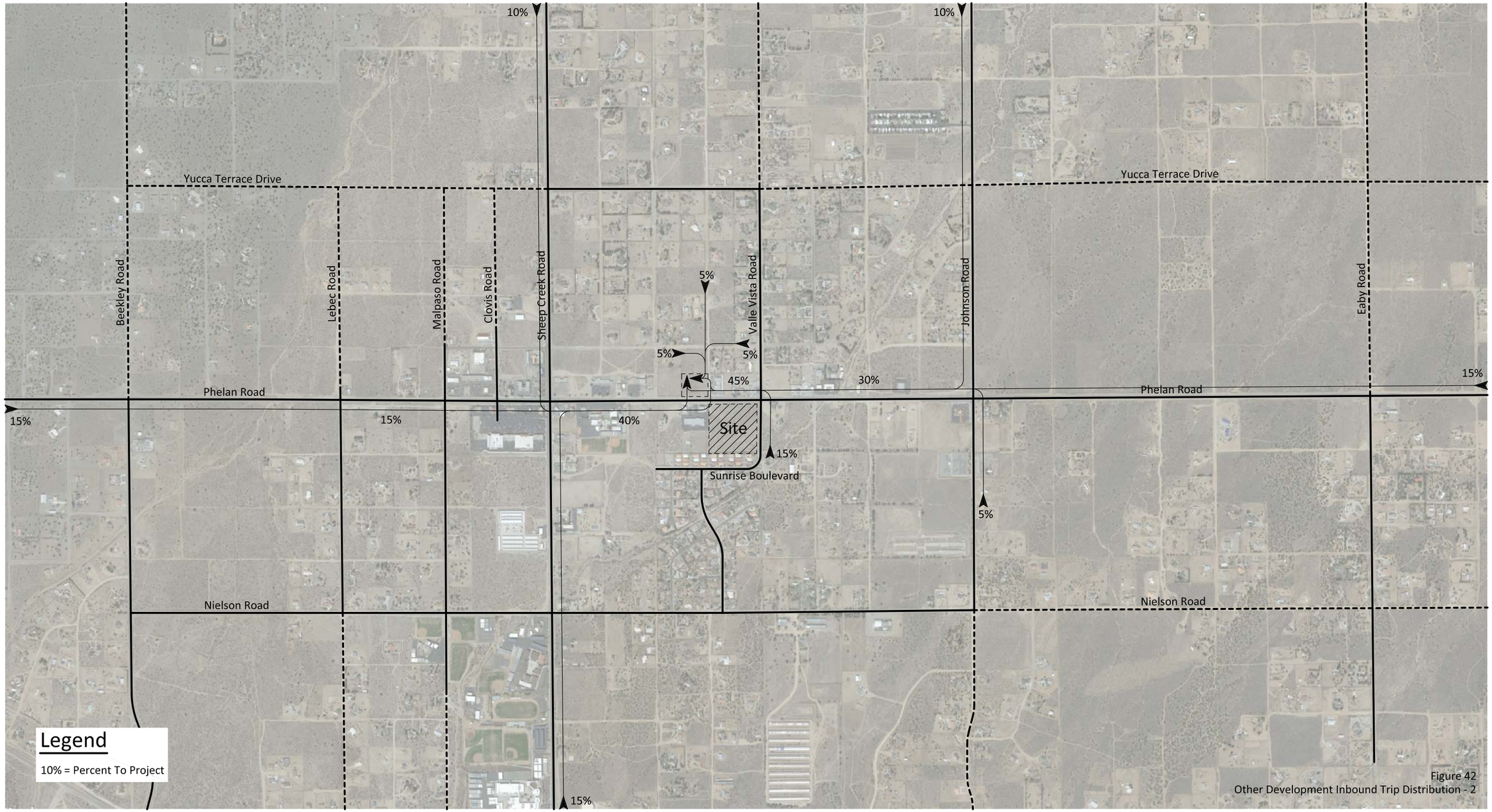


Figure 42
Other Development Inbound Trip Distribution - 2

Figure 43
Opening Year (2017) Other Development Average Daily Traffic Volumes

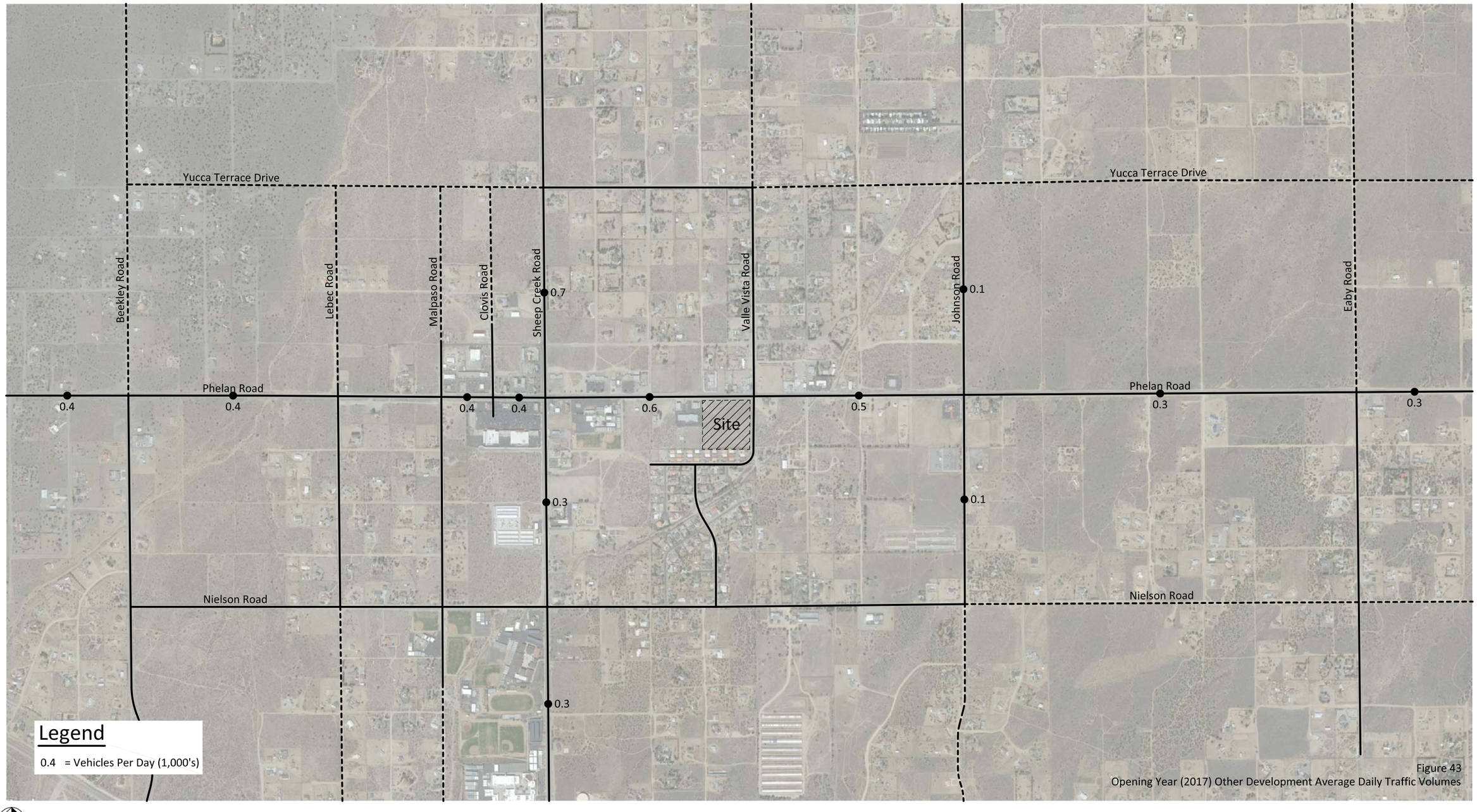


Figure 43
Opening Year (2017) Other Development Average Daily Traffic Volumes

Figure 44
Opening Year (2018) Other Development Average Daily Traffic Volumes

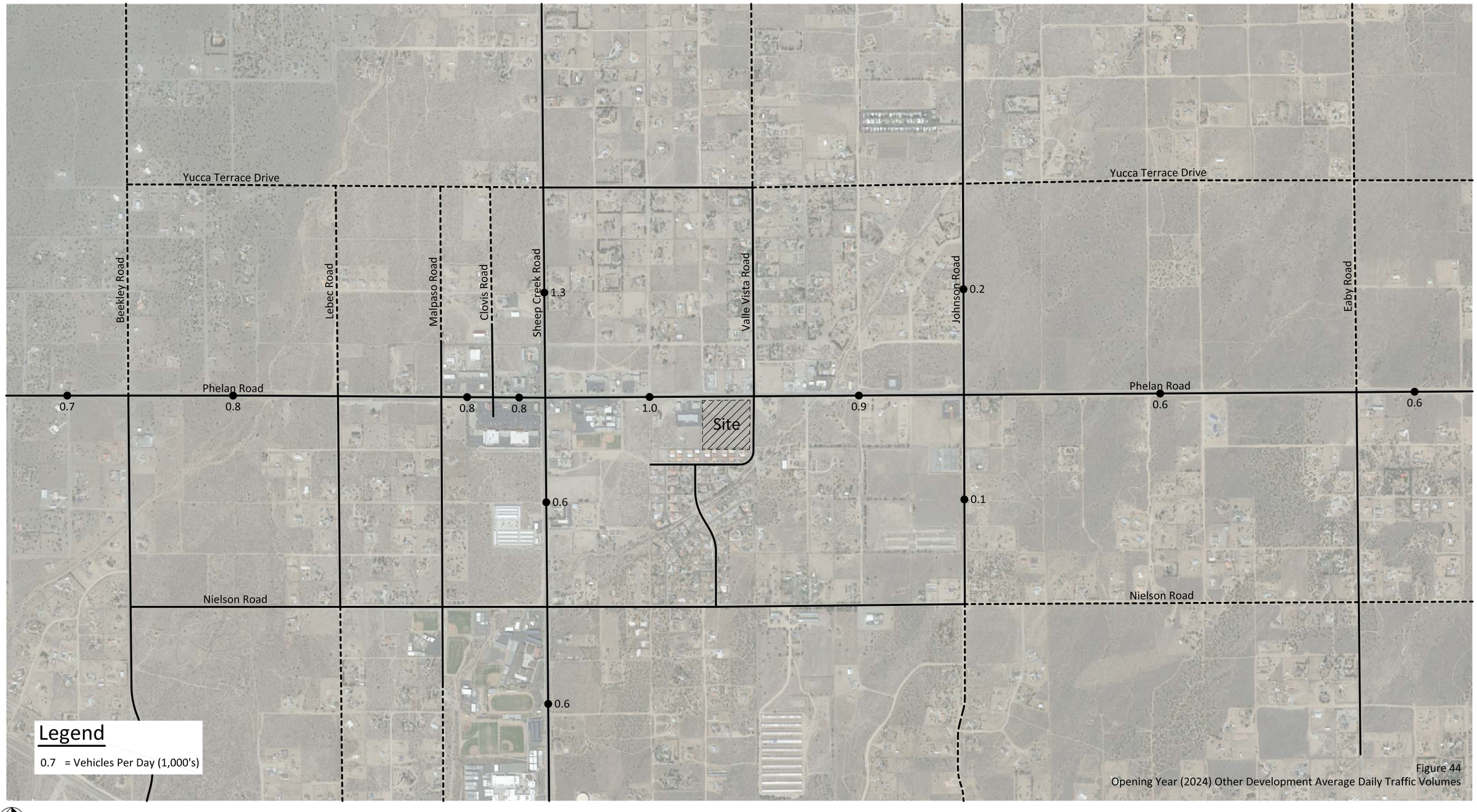


Figure 44
Opening Year (2024) Other Development Average Daily Traffic Volumes

Figure 45
Opening Year (2017) Other Development
Morning Peak Hour Intersection Turning Movement Volumes

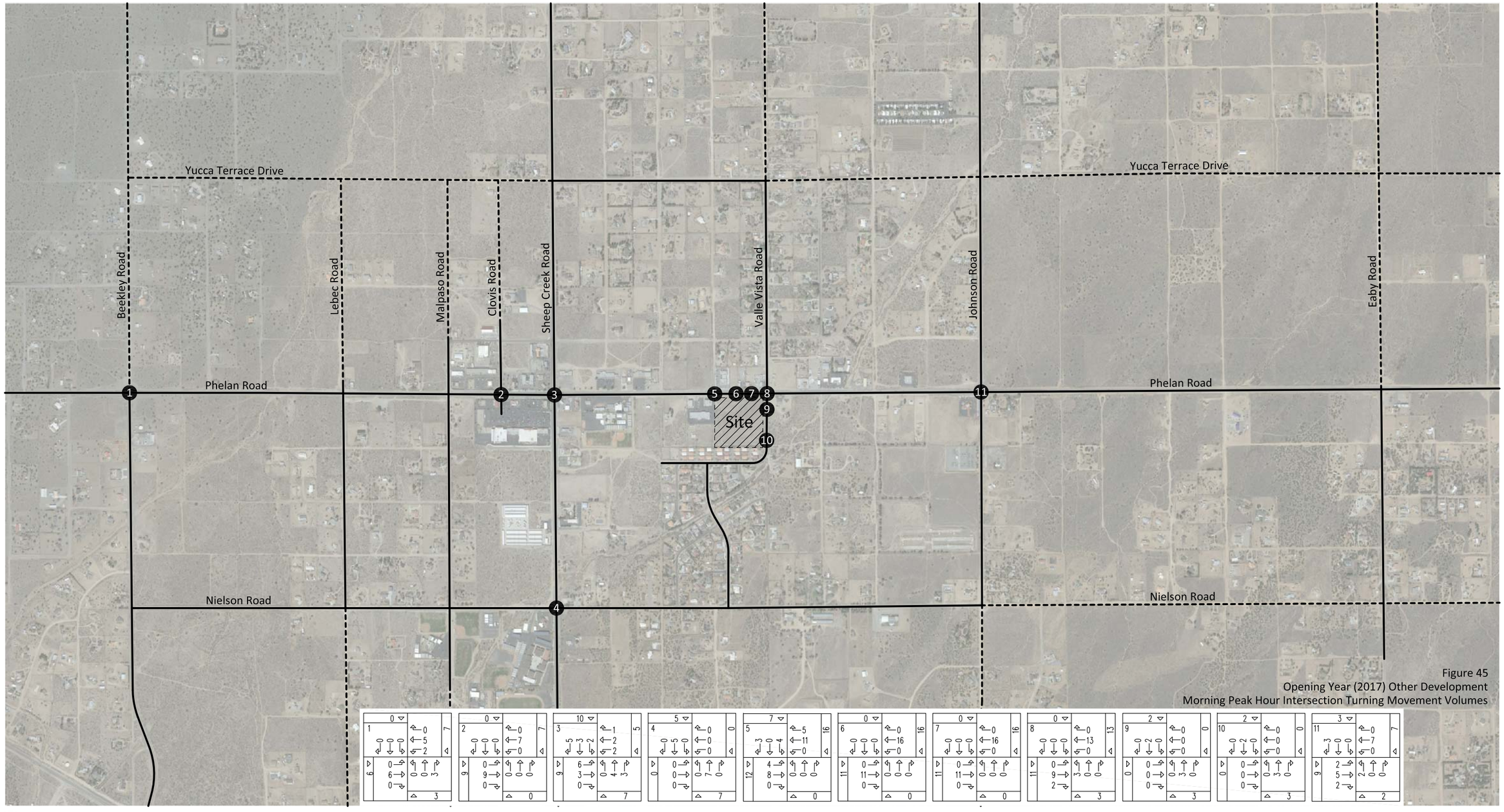


Figure 45
Opening Year (2017) Other Development
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

JN 5868a

Figure 46
Opening Year (2017) Other Development
Evening Peak Hour Intersection Turning Movement Volumes

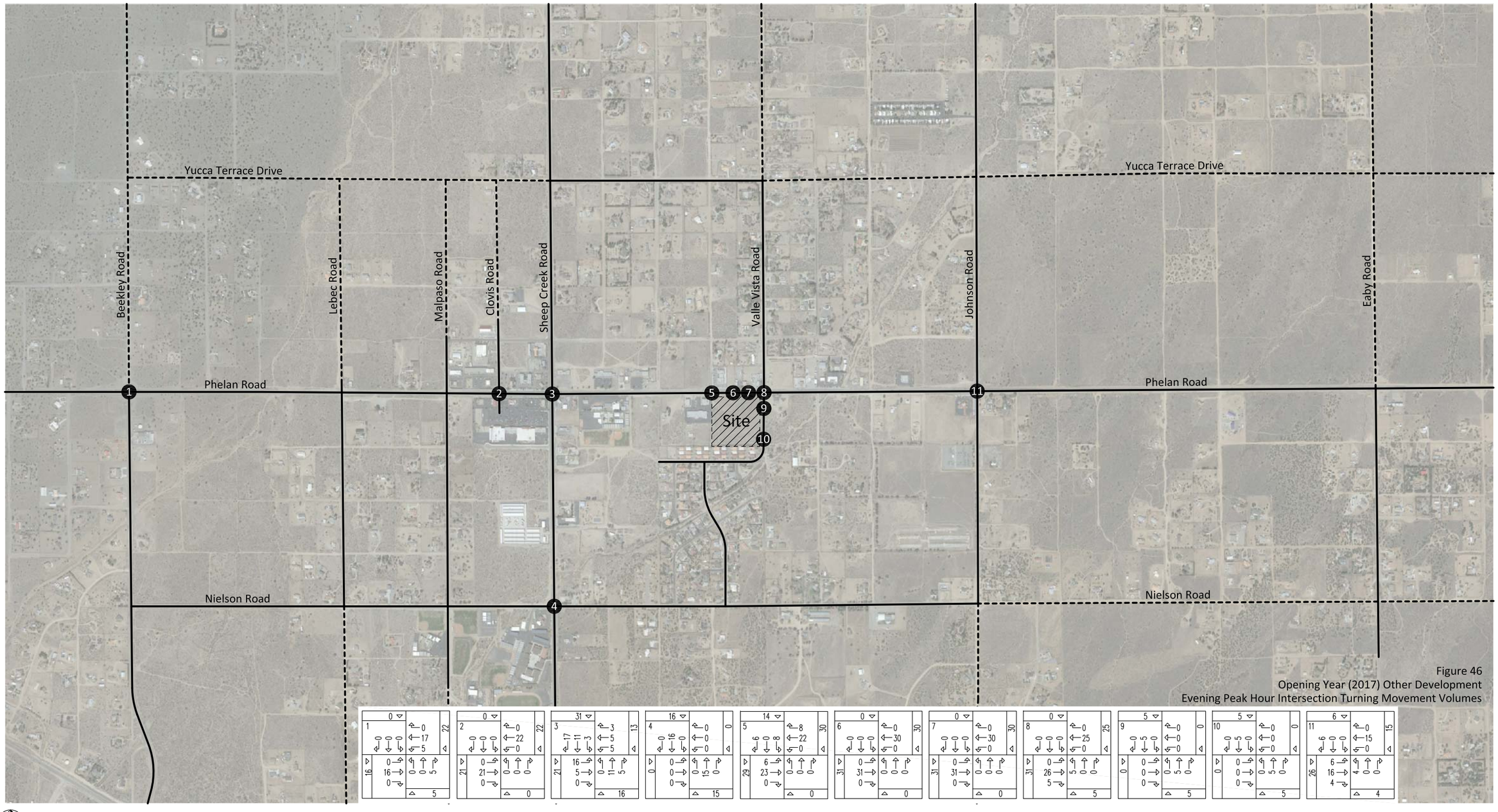


Figure 46
Opening Year (2017) Other Development
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 47
Opening Year (2018) Other Development
Morning Peak Hour Intersection Turning Movement Volumes

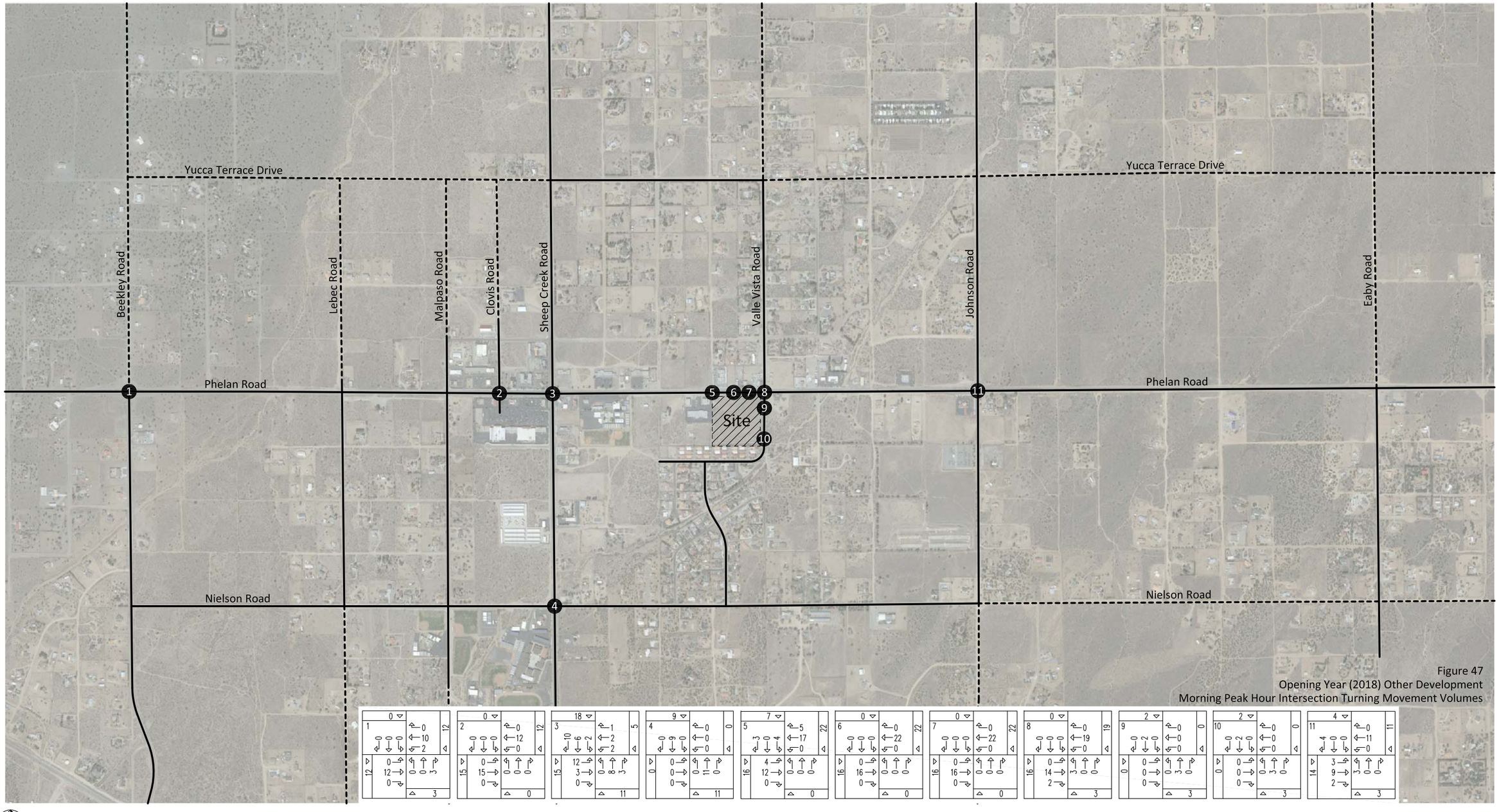


Figure 47
Opening Year (2018) Other Development
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 48
Opening Year (2018) Other Development
Evening Peak Hour Intersection Turning Movement Volumes

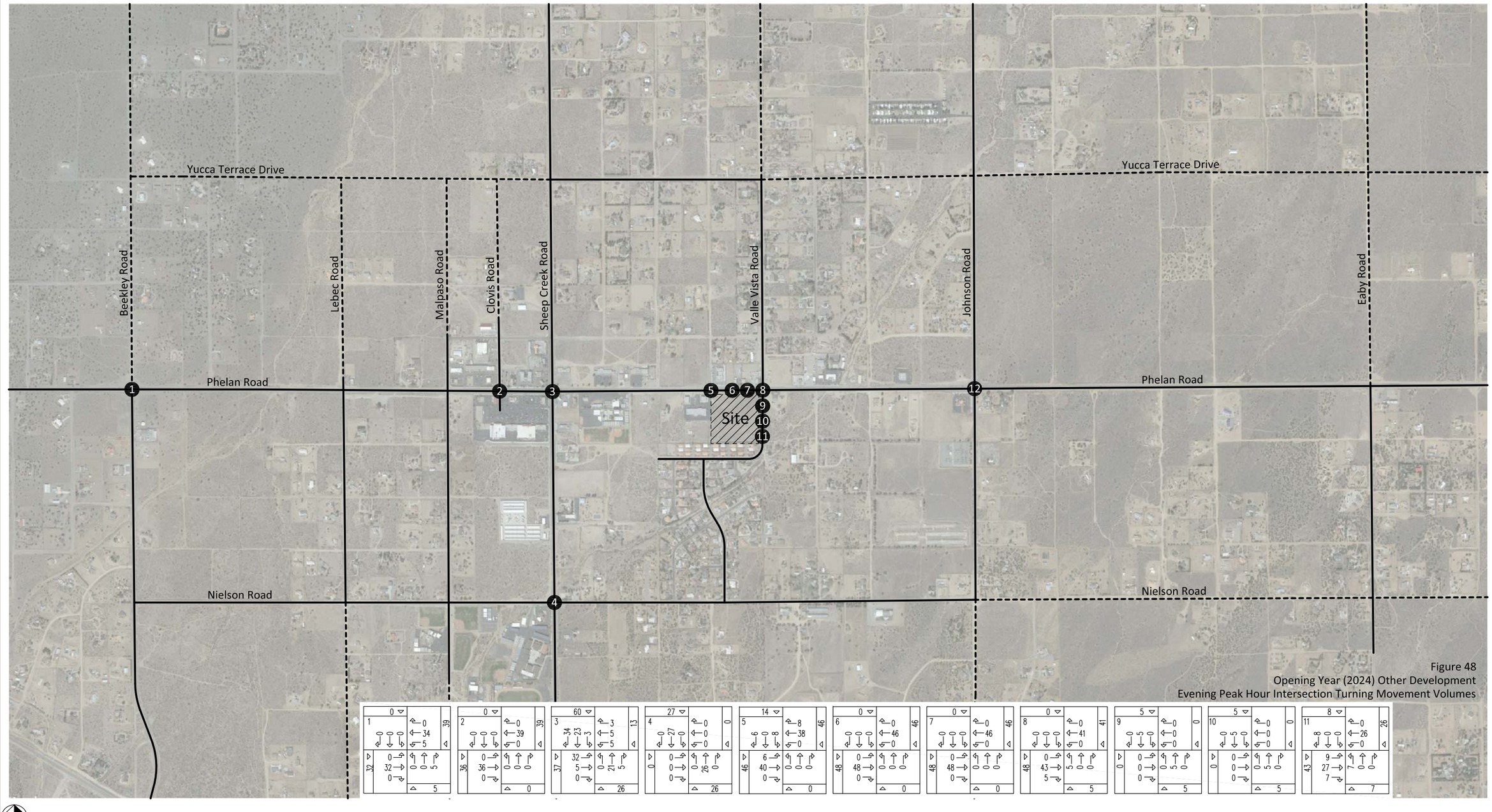


Figure 48
Opening Year (2024) Other Development
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

JN 5868a

Figure 49
Existing Plus Project Average Daily Traffic Volumes

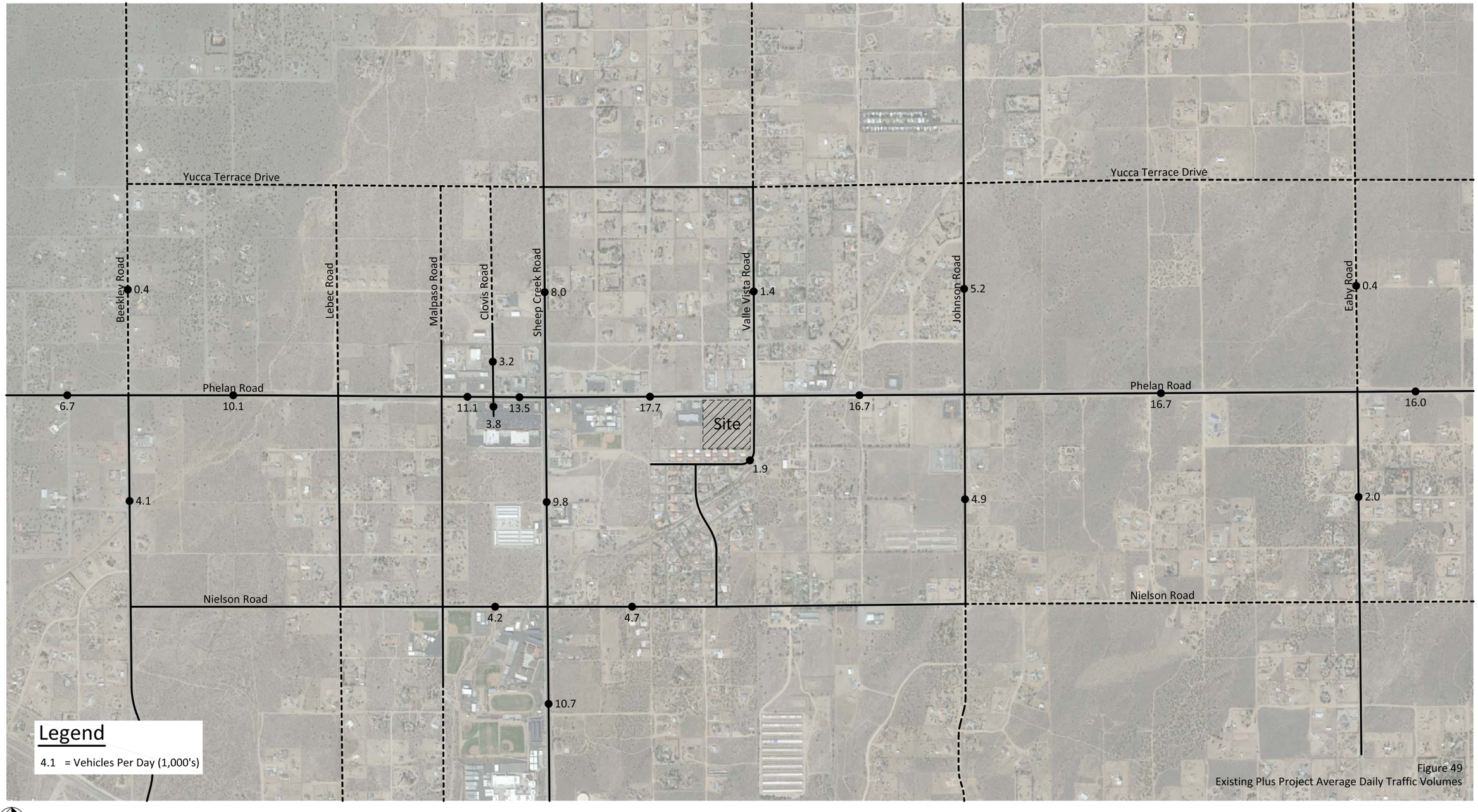


Figure 50
Opening Year (2017) Without and With Project Average Daily Traffic Volumes

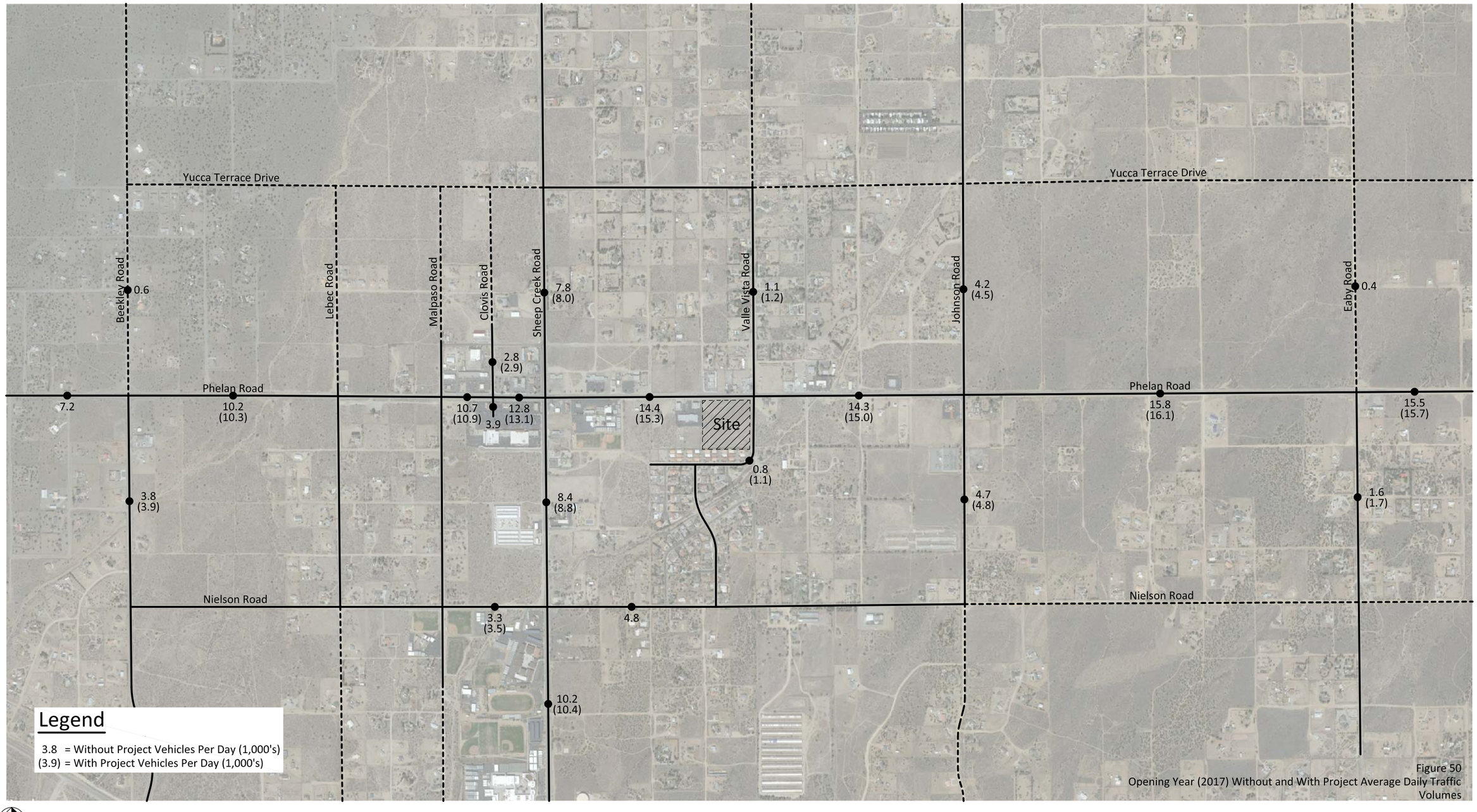


Figure 50
Opening Year (2017) Without and With Project Average Daily Traffic Volumes

Figure 51
Opening Year (2018) Without and With Project Average Daily Traffic Volumes

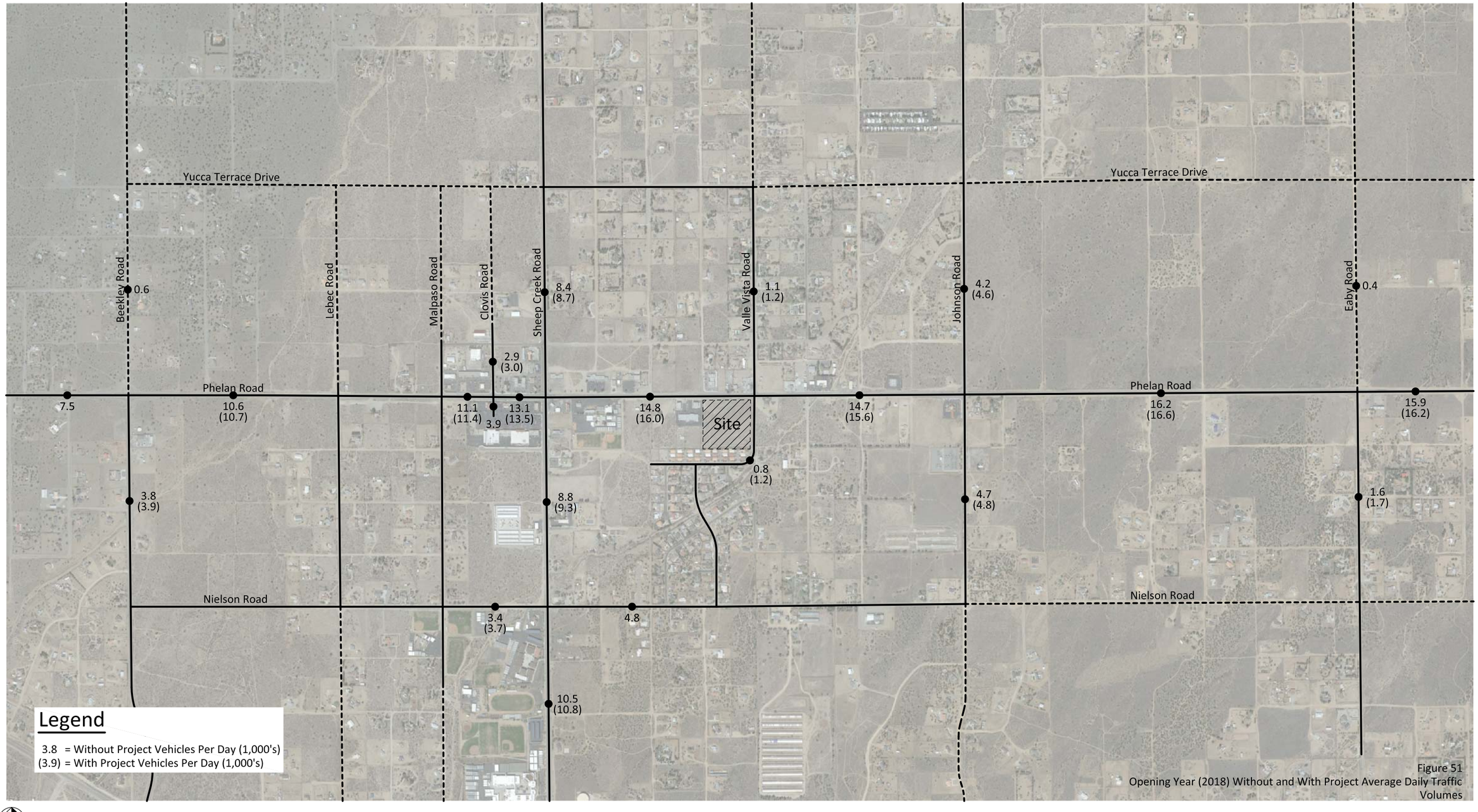


Figure 51
Opening Year (2018) Without and With Project Average Daily Traffic Volumes

Figure 52
Opening Year (2019) Without and With Project Average Daily Traffic Volumes

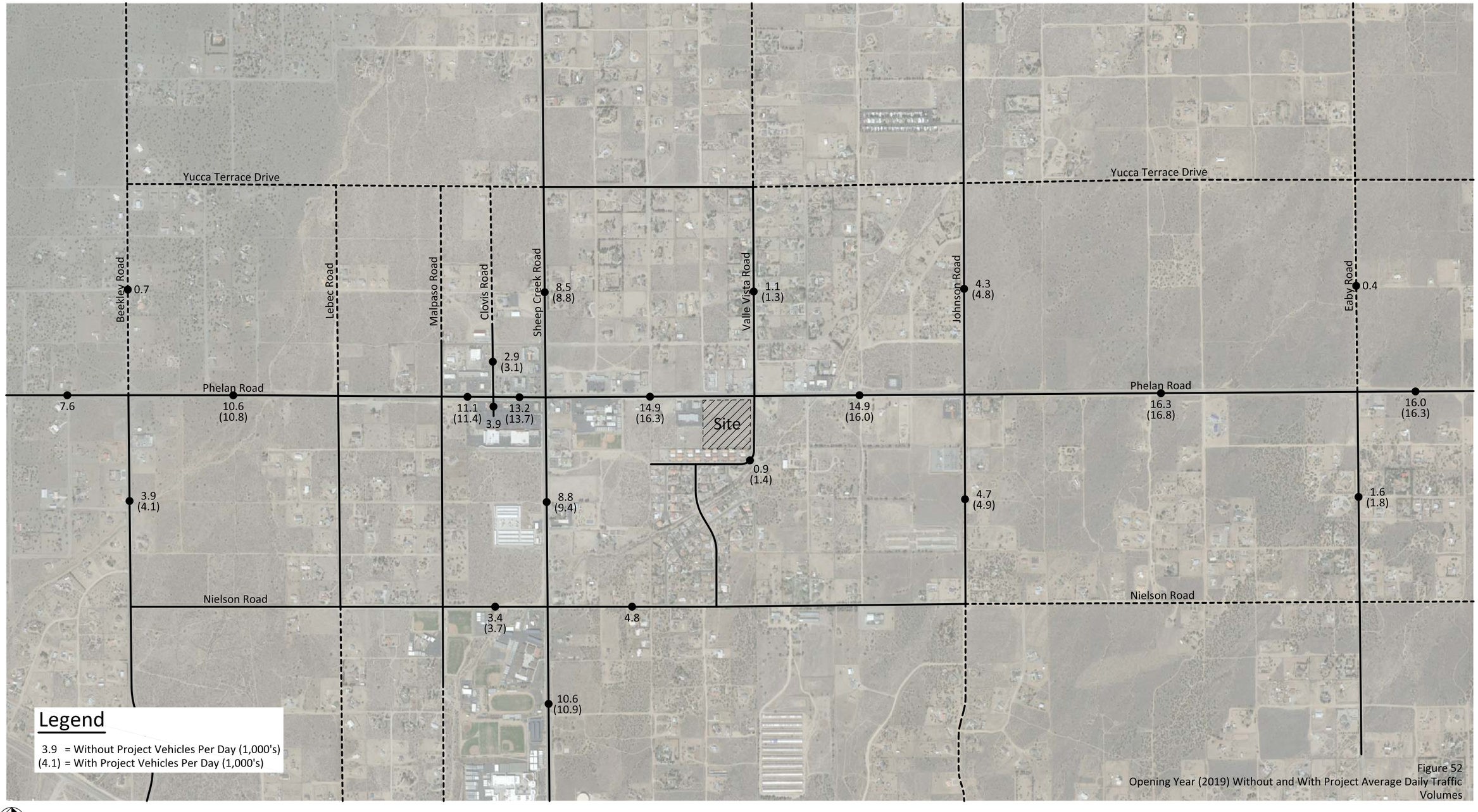


Figure 52
Opening Year (2019) Without and With Project Average Daily Traffic Volumes

Figure 53
Opening Year (2020) Without and With Project Average Daily Traffic Volumes

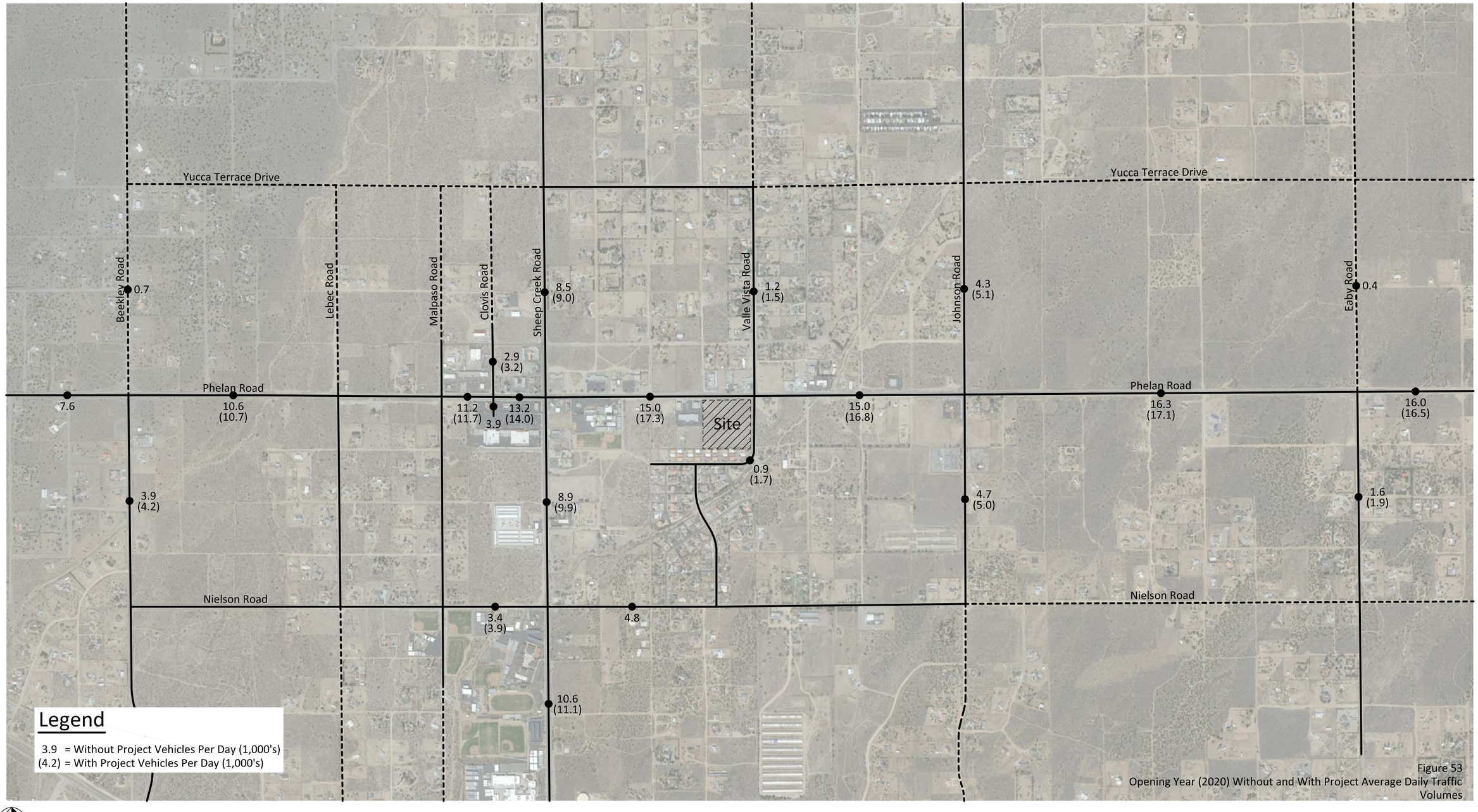


Figure 53
Opening Year (2020) Without and With Project Average Daily Traffic Volumes

Figure 54
Opening Year (2021) Without and With Project Average Daily Traffic Volumes

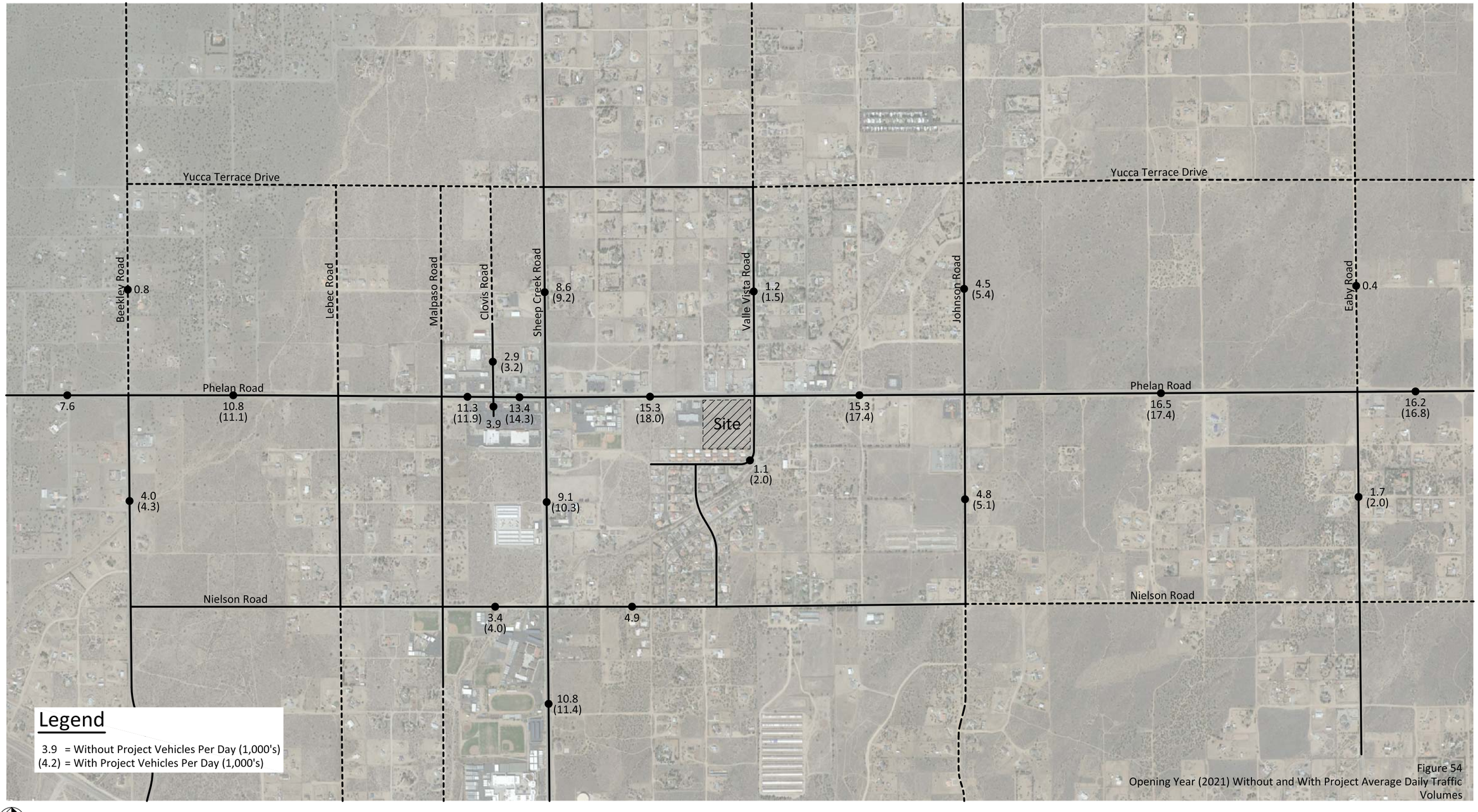


Figure 54
Opening Year (2021) Without and With Project Average Daily Traffic Volumes

Figure 55
Opening Year (2022) Without and With Project Average Daily Traffic Volumes

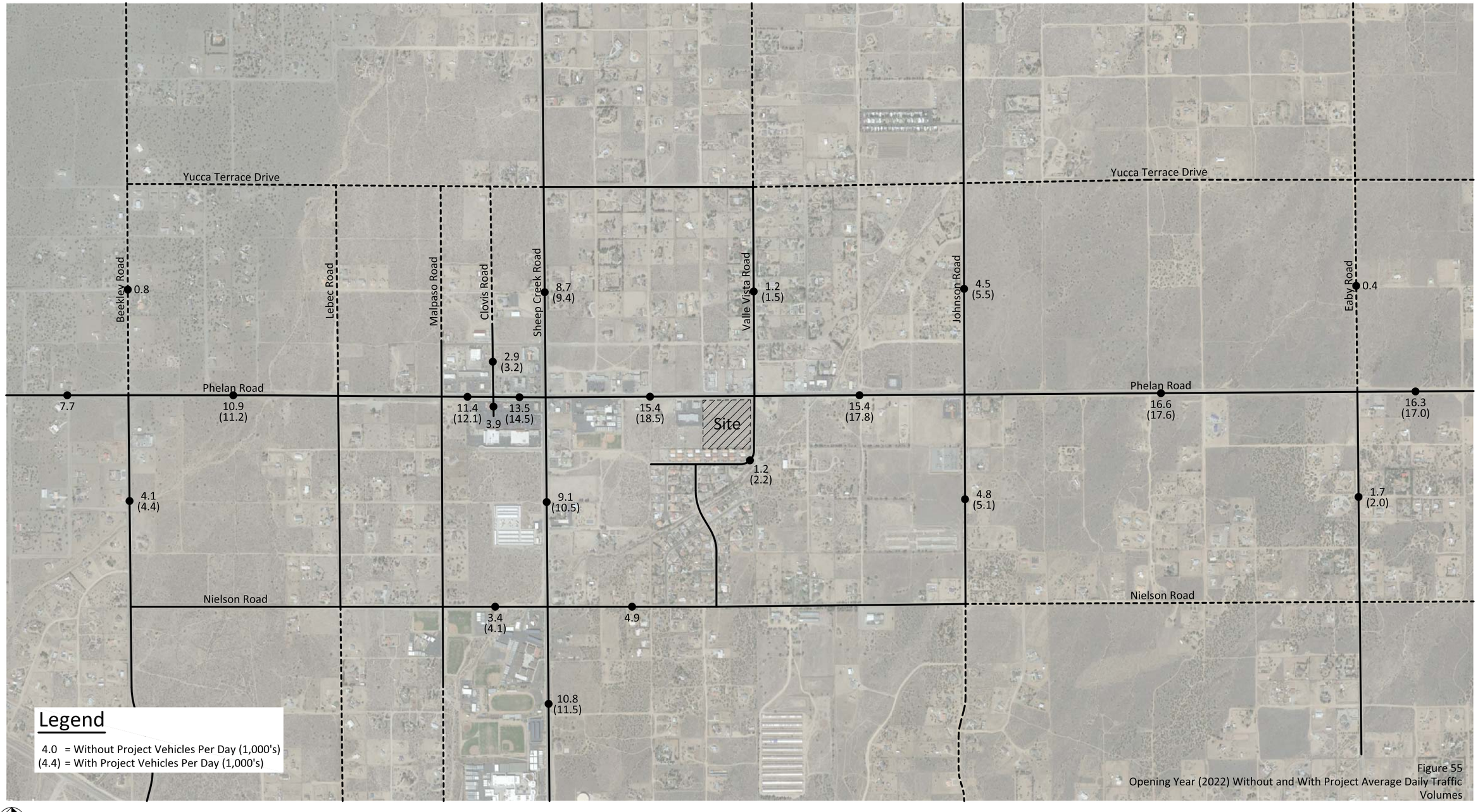
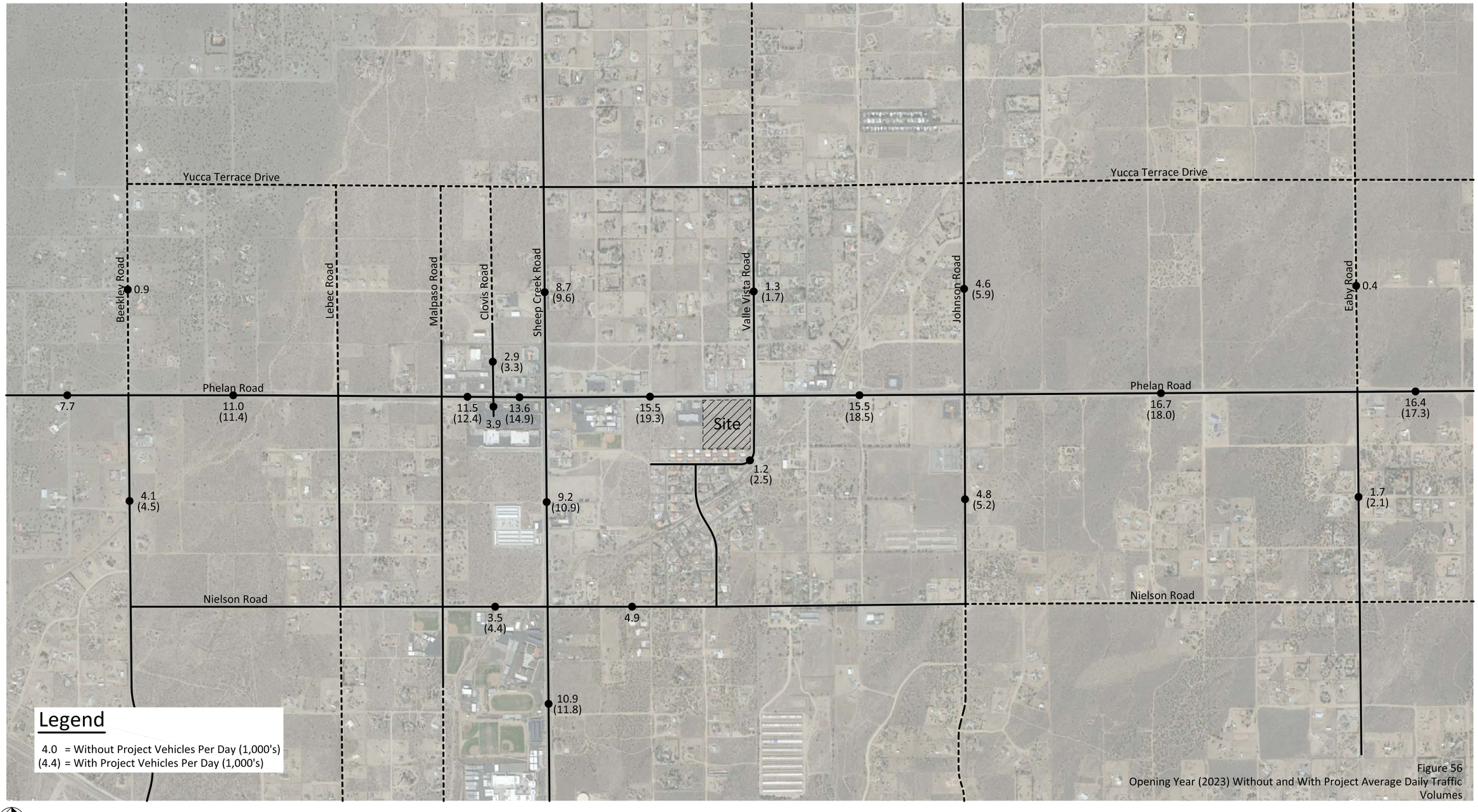


Figure 56
Opening Year (2023) Without and With Project Average Daily Traffic Volumes



KUNZMAN ASSOCIATES, INC.
OVER 40 YEARS OF EXCELLENT SERVICE

JN 5868a

Figure 57
Opening Year (2024) Without and With Project Average Daily Traffic Volumes

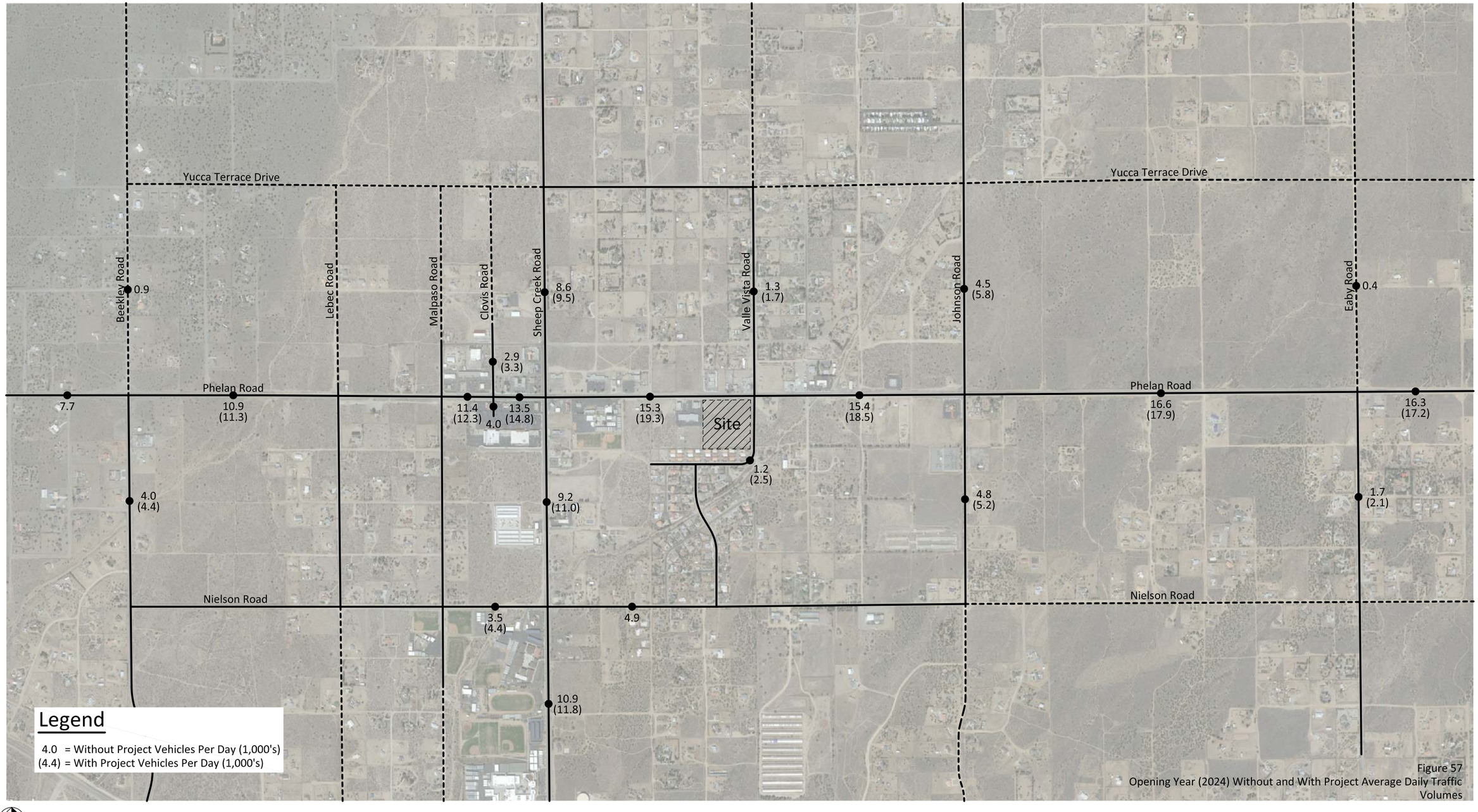


Figure 57
Opening Year (2024) Without and With Project Average Daily Traffic Volumes

KUNZMAN ASSOCIATES, INC.
OVER 40 YEARS OF EXCELLENT SERVICE

JN 5868a

Figure 58
Horizon Year (2035) Without and With Project Average Daily Traffic Volumes

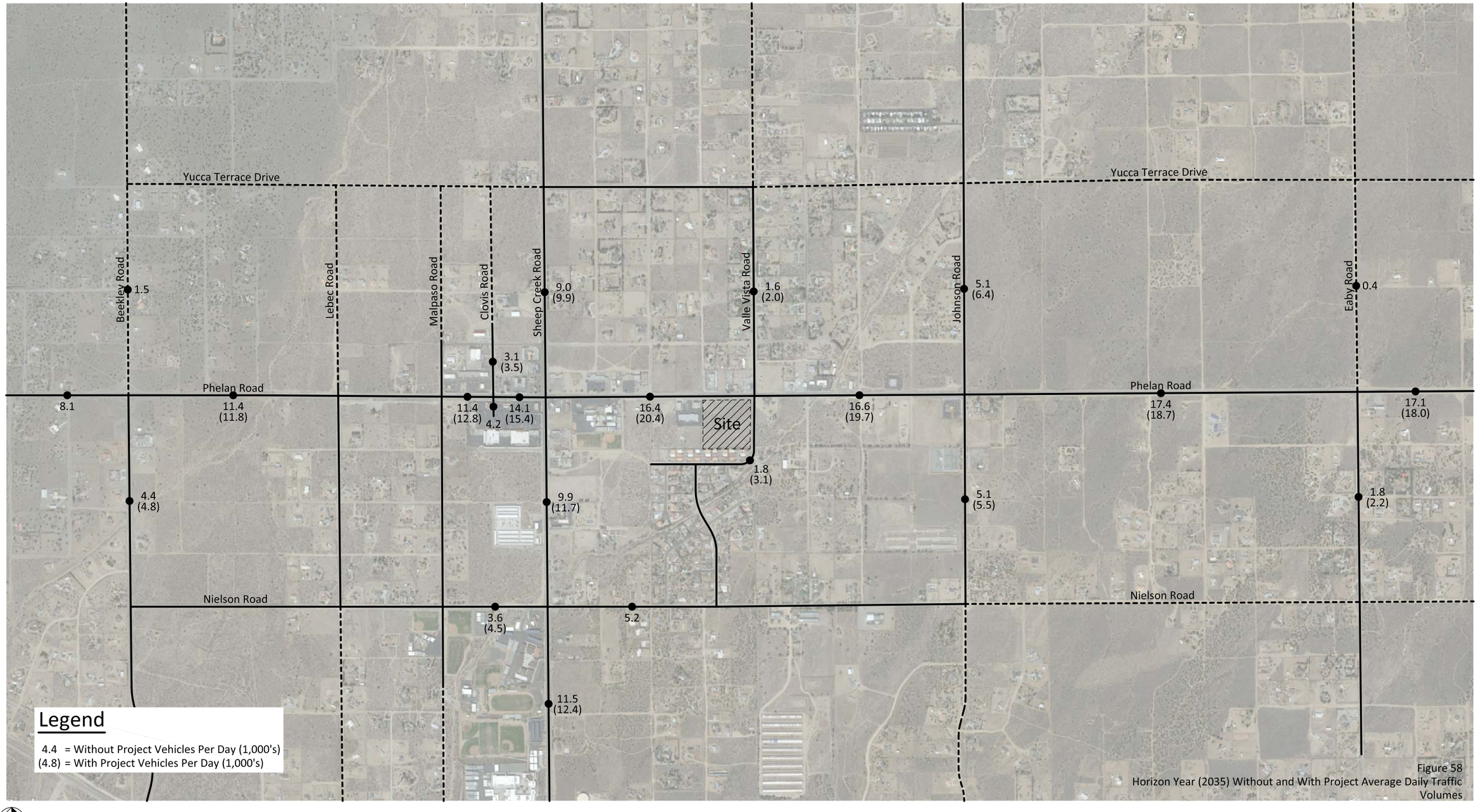


Figure 58
Horizon Year (2035) Without and With Project Average Daily Traffic Volumes

JN 5868a

Figure 59
Existing Plus Project
Morning Peak Hour Intersection Turning Movement Volumes

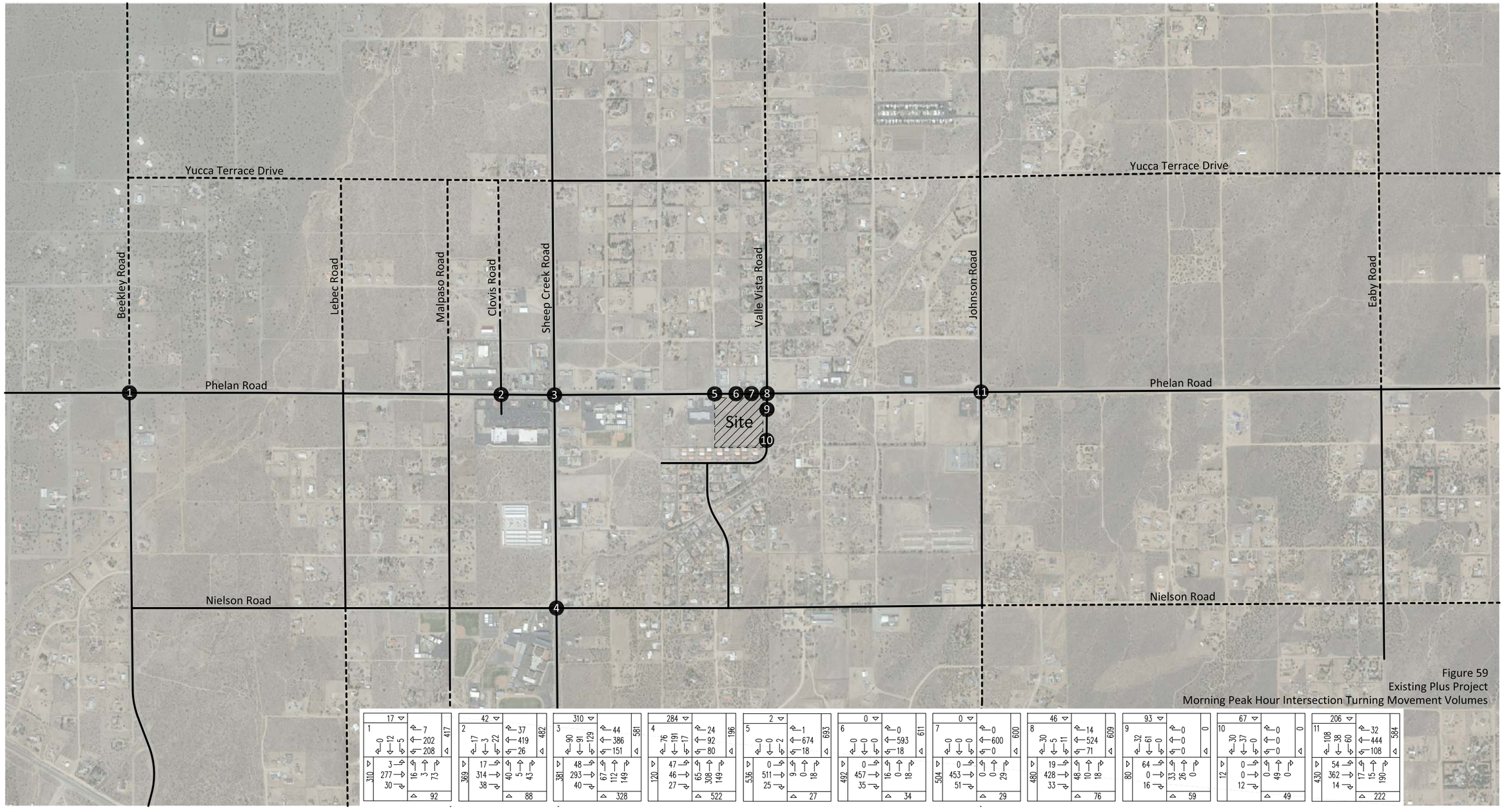


Figure 59
Existing Plus Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 60
Existing Plus Project
Evening Peak Hour Intersection Turning Movement Volumes

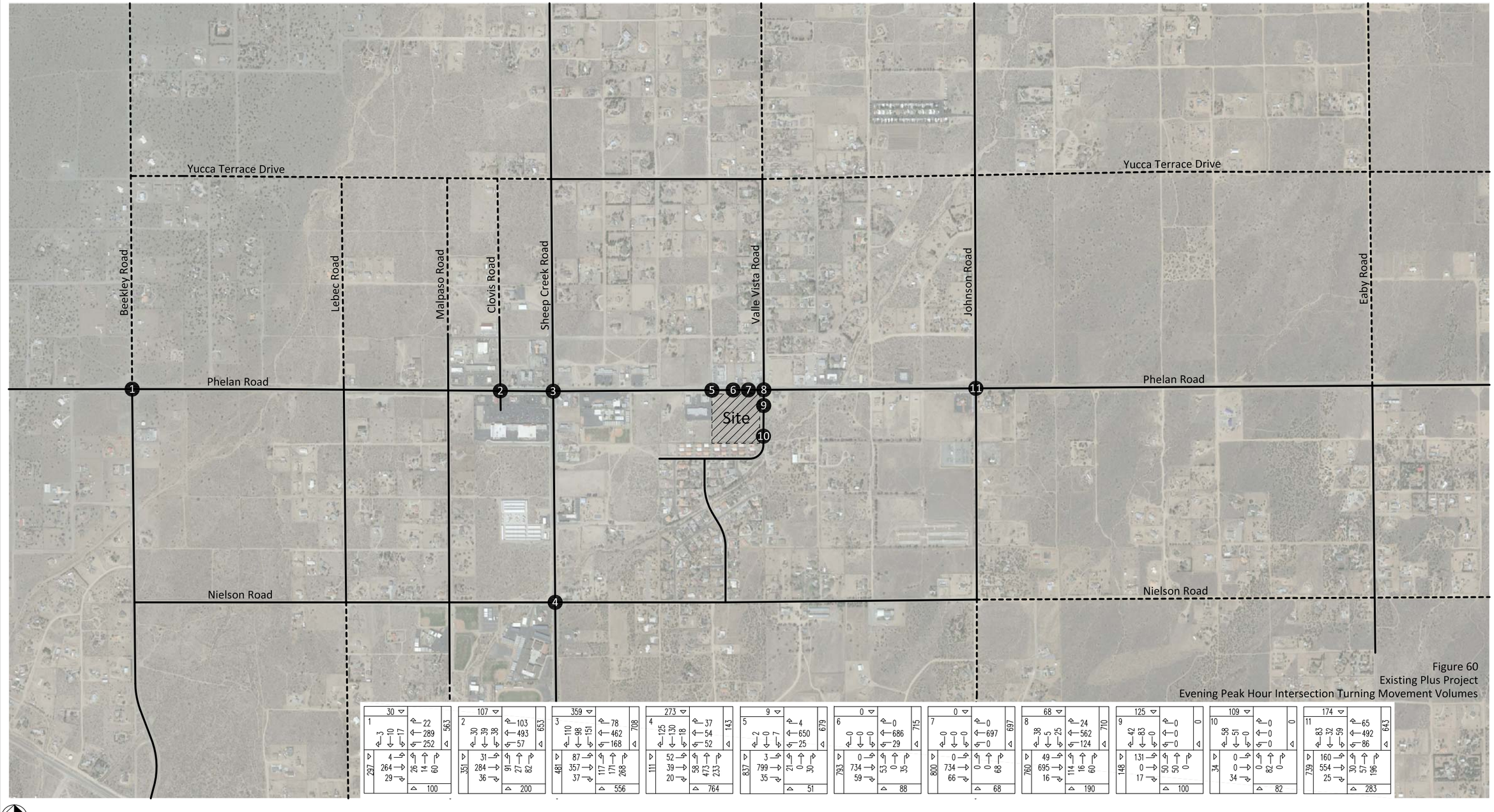


Figure 60
Existing Plus Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 61
Opening Year (2017) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

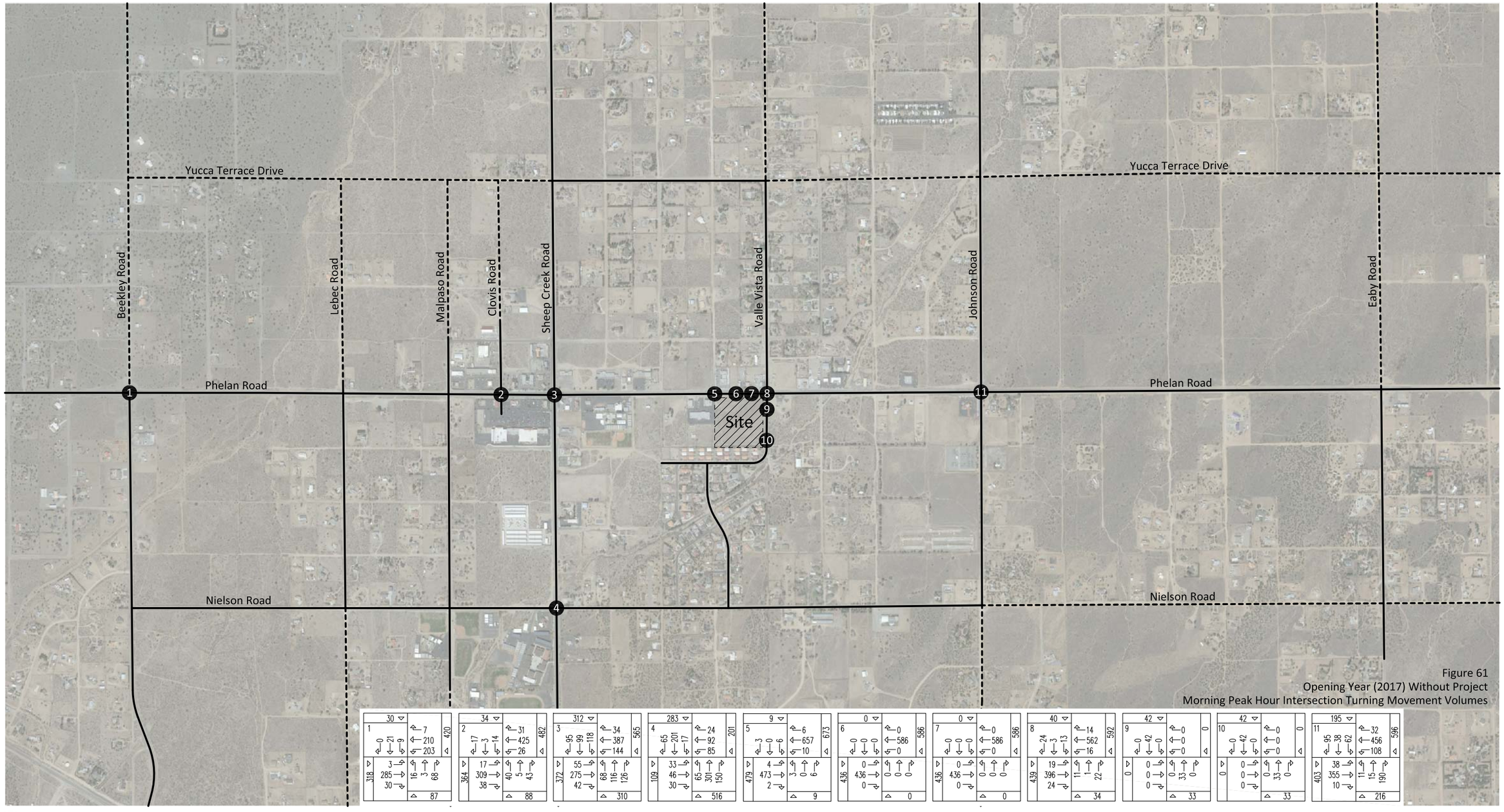


Figure 61
Opening Year (2017) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 62
Opening Year (2017) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

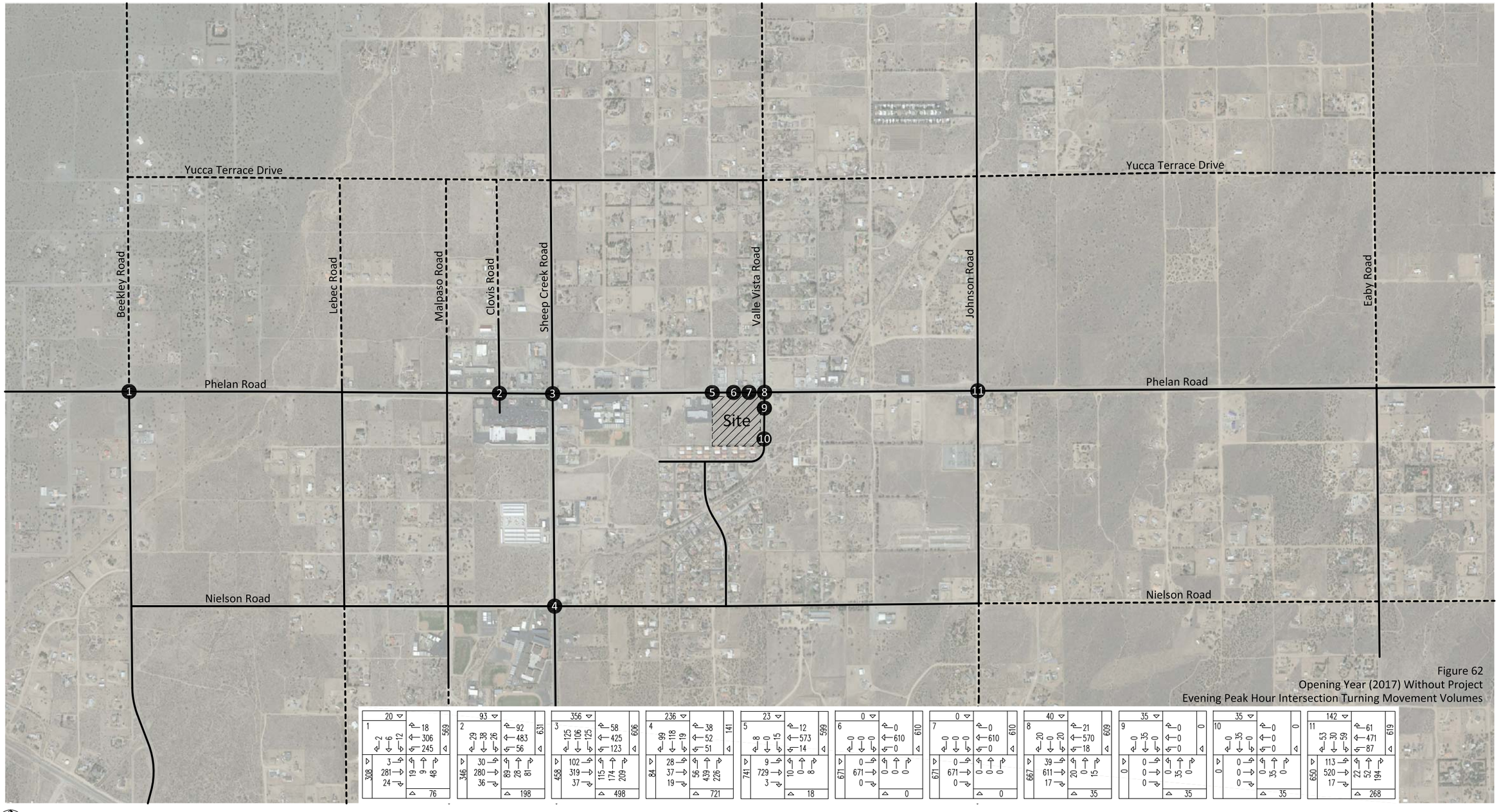


Figure 62
Opening Year (2017) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 63
Opening Year (2017) With Project
Morning Peak Hour Intersection Turning Movement Volumes

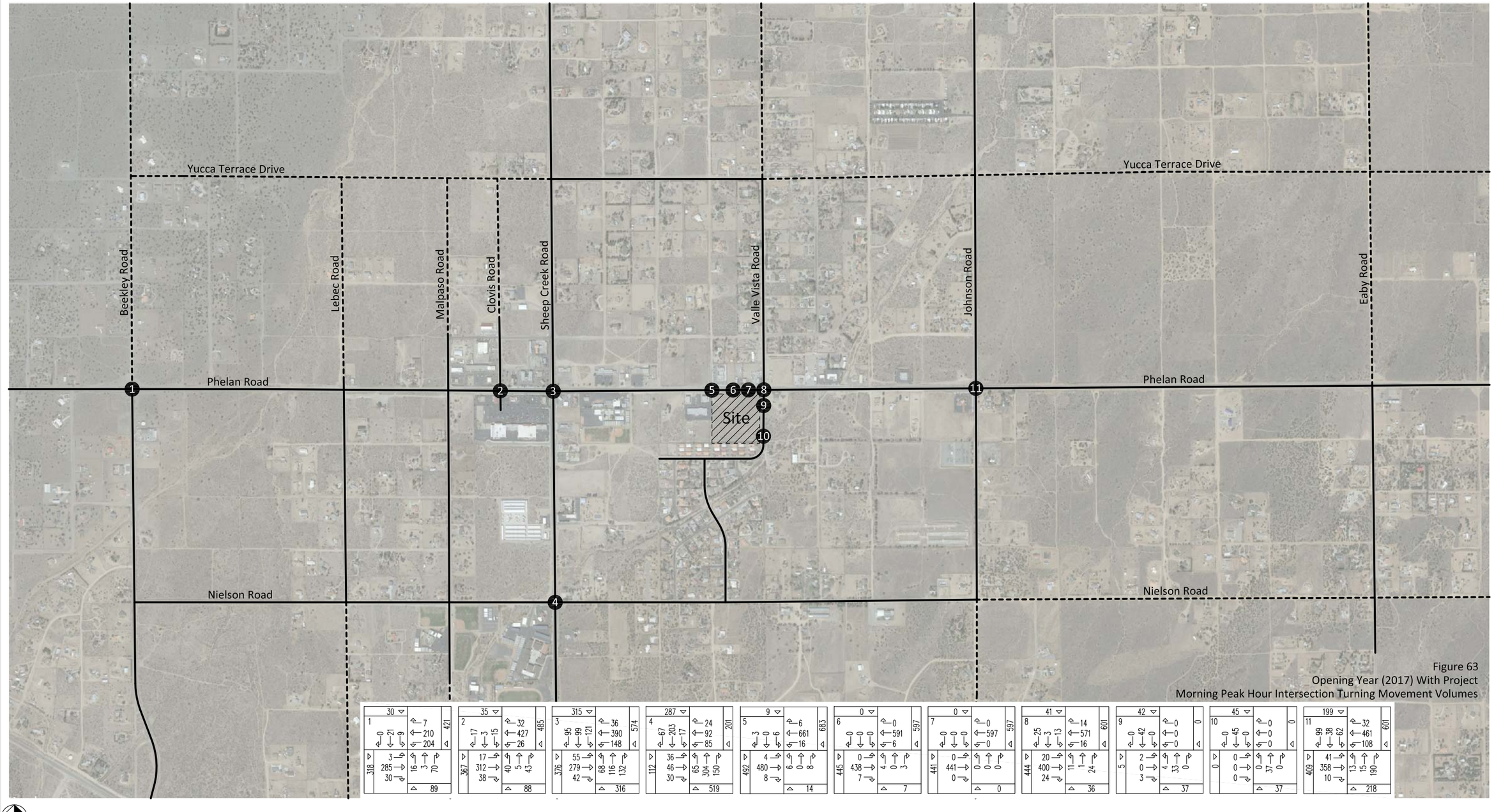


Figure 63
Opening Year (2017) With Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 64
Opening Year (2017) With Project
Evening Peak Hour Intersection Turning Movement Volumes

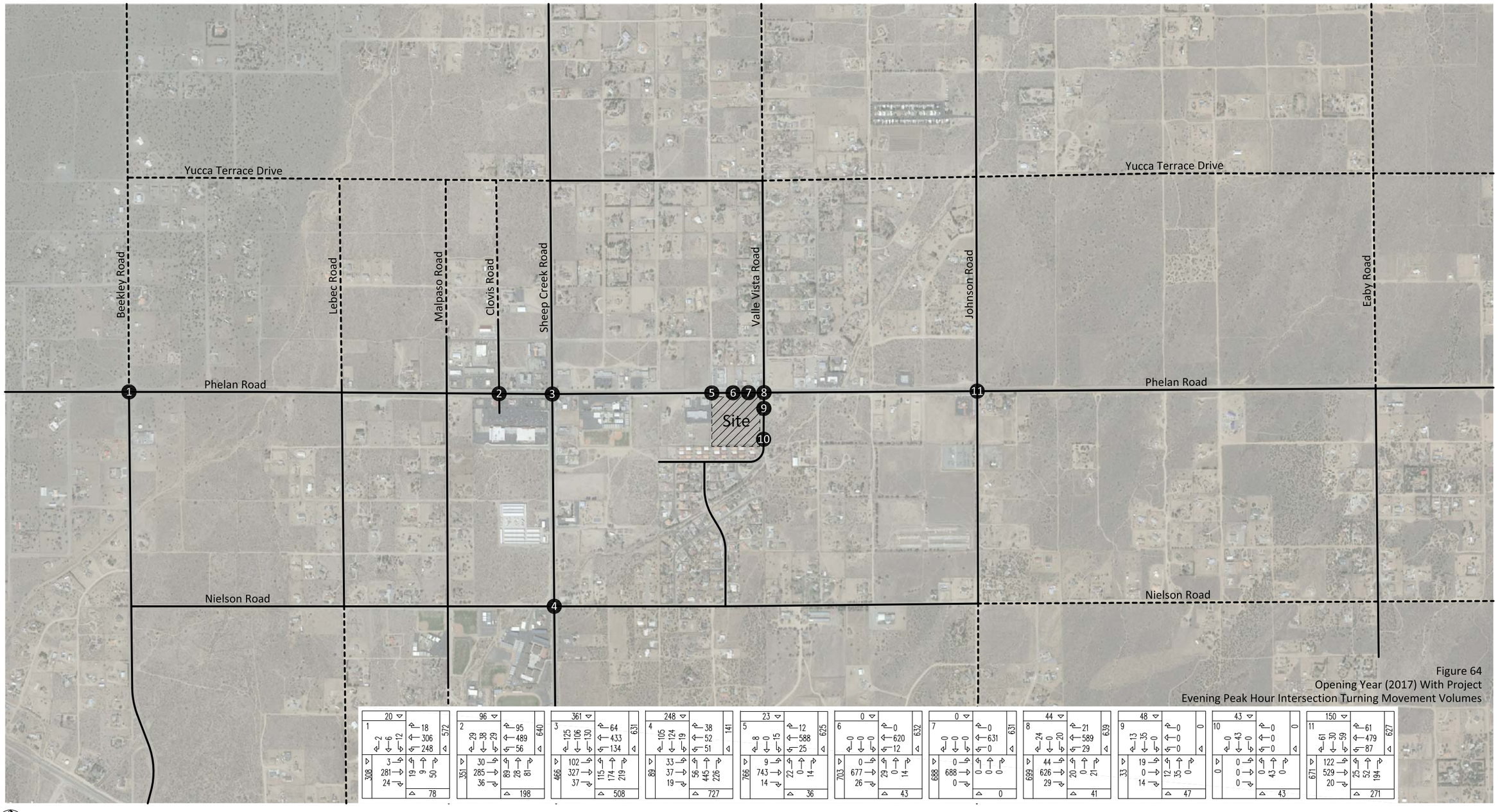


Figure 64
Opening Year (2017) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 65
Opening Year (2018) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

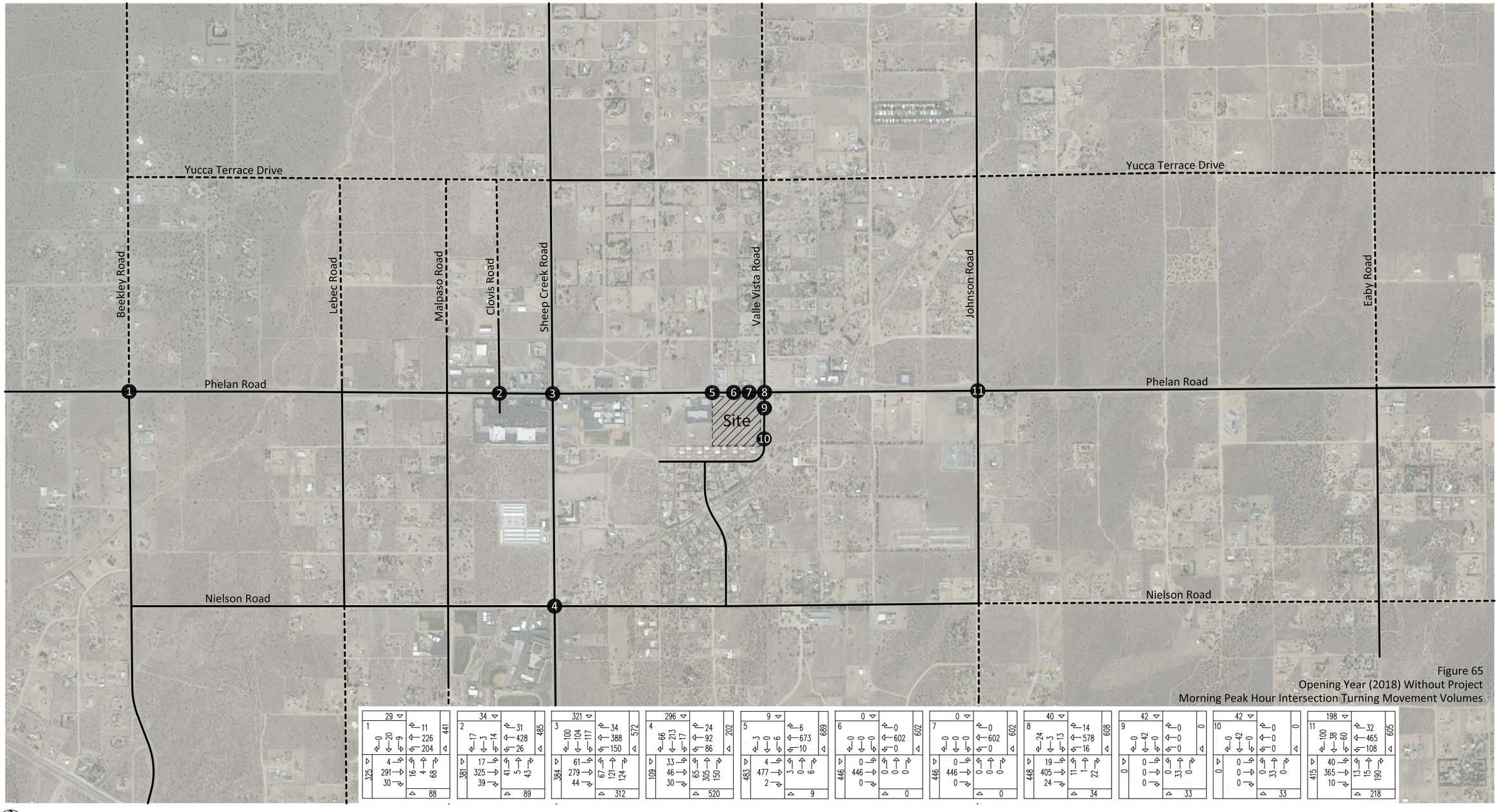


Figure 65
Opening Year (2018) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 66
Opening Year (2018) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

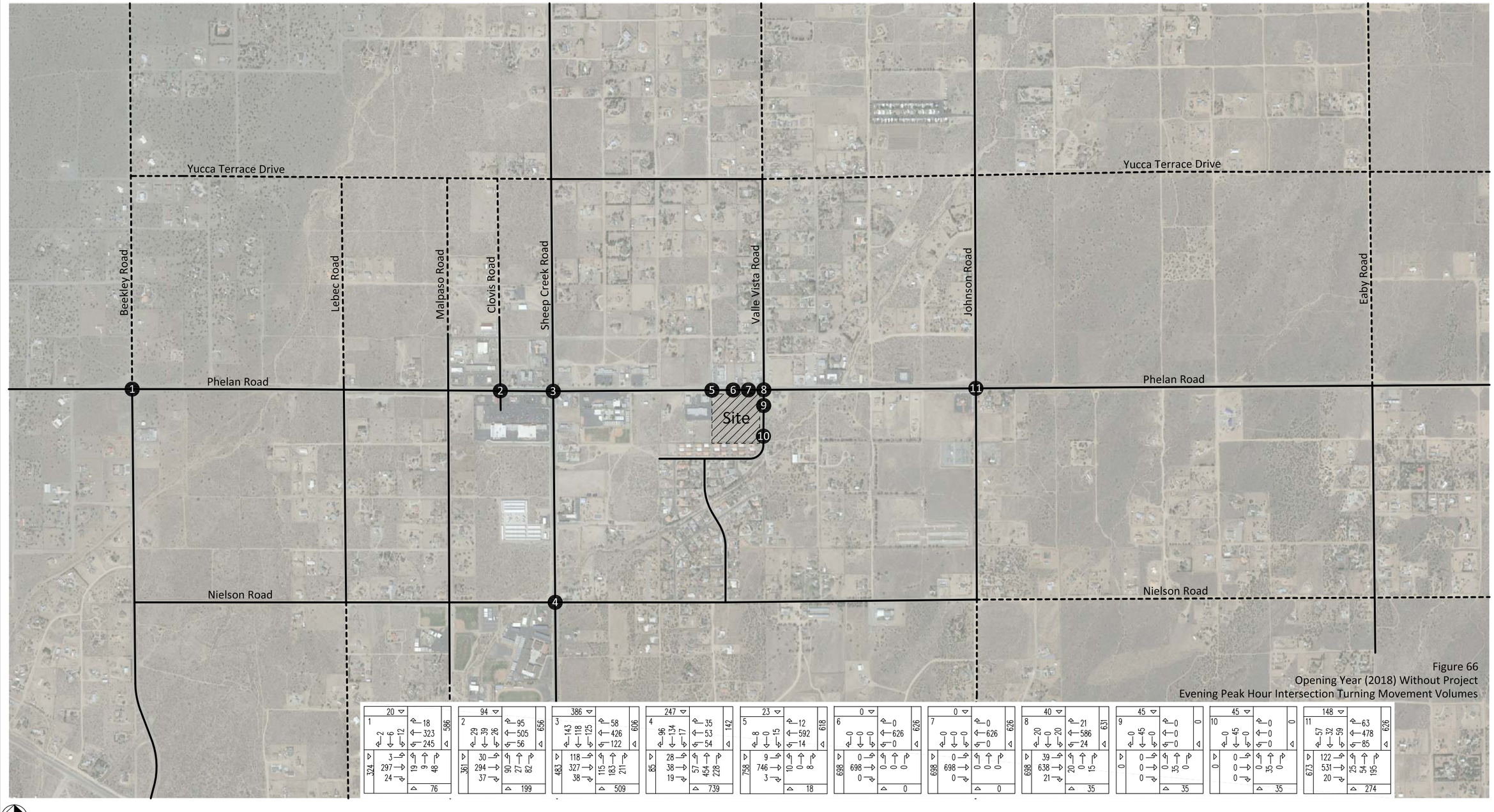


Figure 66
Opening Year (2018) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 67
Opening Year (2018) With Project
Morning Peak Hour Intersection Turning Movement Volumes

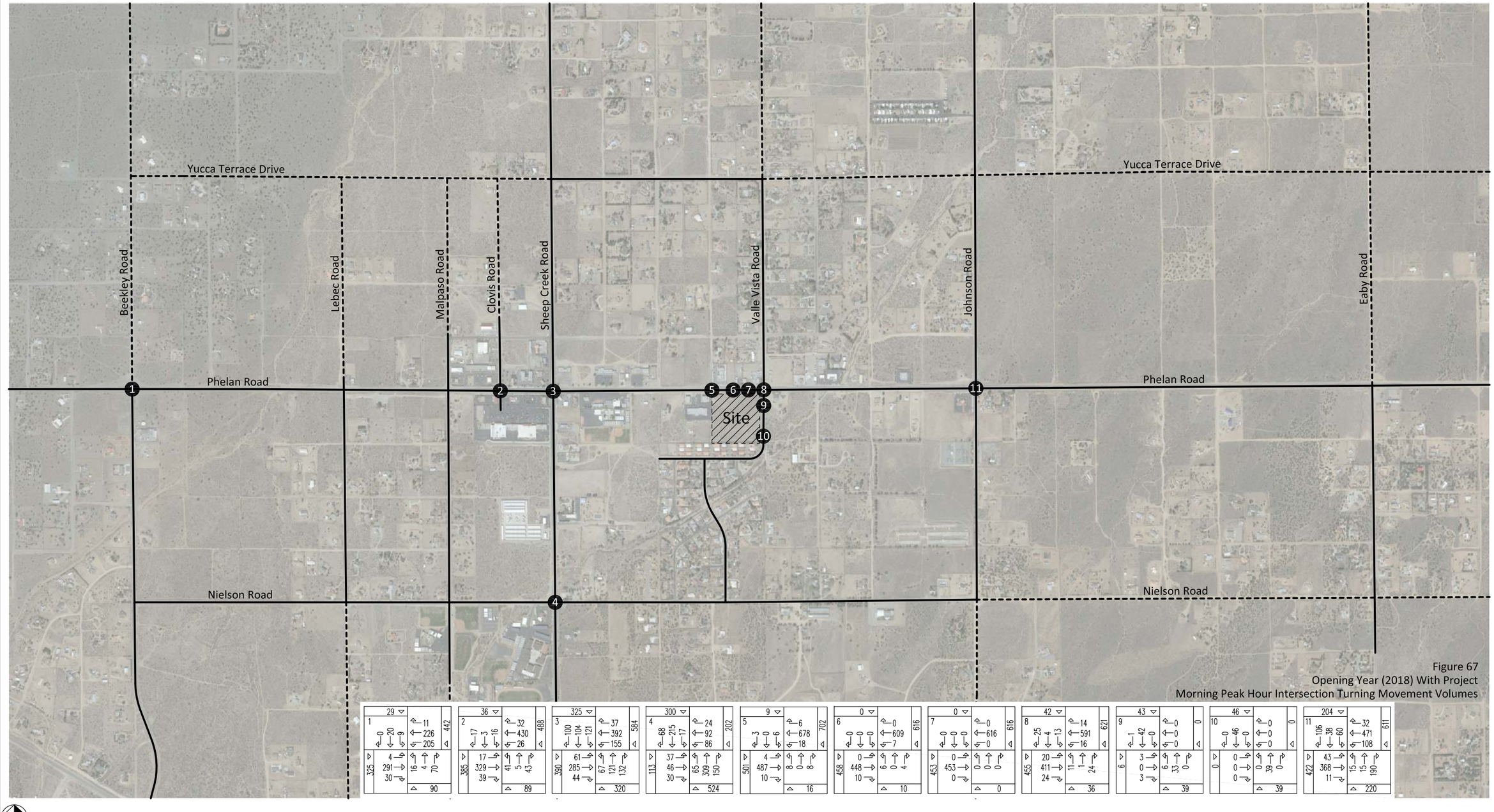


Figure 67
Opening Year (2018) With Project
Morning Peak Hour Intersection Turning Movement Volumes

1	2	3	4	5	6	7	8	9	10	11
29	36	325	300	9	0	0	0	42	43	46	204
1	2	3	4	5	6	7	8	9	10	11
0	17	100	68	3	0	0	25	1	106
20	3	104	215	0	6	0	4	42	0	46	38
9	16	121	17	6	678	616	0	13	0	0	60
11	32	37	24	0	0	0	14	0	0	0	32
226	430	392	92	609	616	591	0	0	471
205	26	155	86	7	0	0	16	0	0	0	108
442	488	584	202	616	616	621	0	0	611
325	4	385	17	390	61	113	37	501	4	458	0	453	0	455	20	6	3	0	3	0	0	0	422	43
291	329	285	46	487	8	448	0	453	0	411	24	0	33	0	0	368
30	39	44	30	10	8	10	6	0	0	24	1	0	0	0	39	0	11
16	41	67	65	4	0	6	0	0	0	11	0	0	6	0	0	15
4	5	121	309	6	0	6	0	0	0	1	0	0	0	0	0	15
70	43	132	150	0	4	0	0	0	0	24	0	0	0	0	0	190
90	89	320	524	16	10	0	36	39	39	220

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 68
Opening Year (2018) With Project
Evening Peak Hour Intersection Turning Movement Volumes

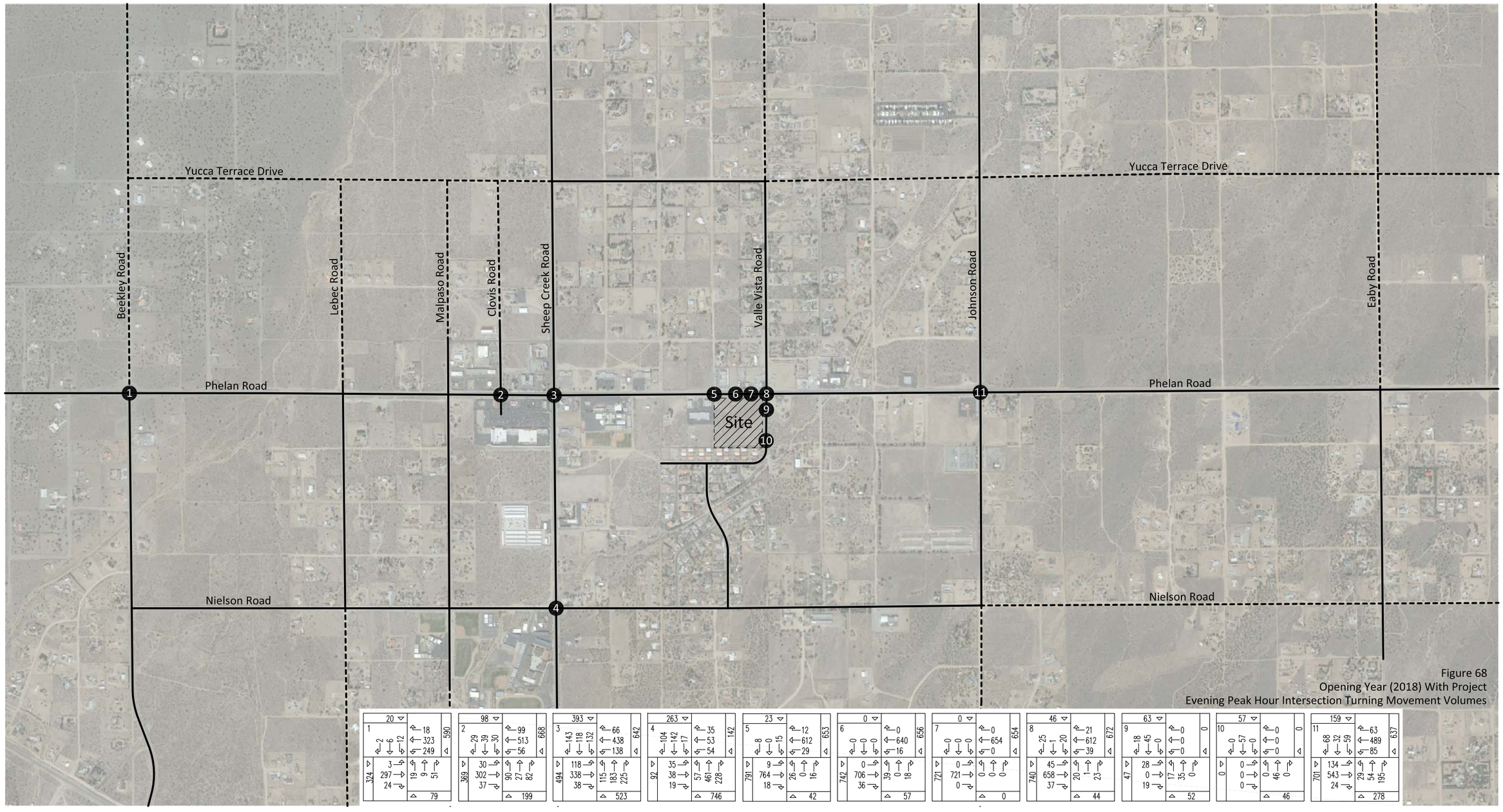


Figure 68
Opening Year (2018) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

JN 5868a

Figure 69
Opening Year (2019) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

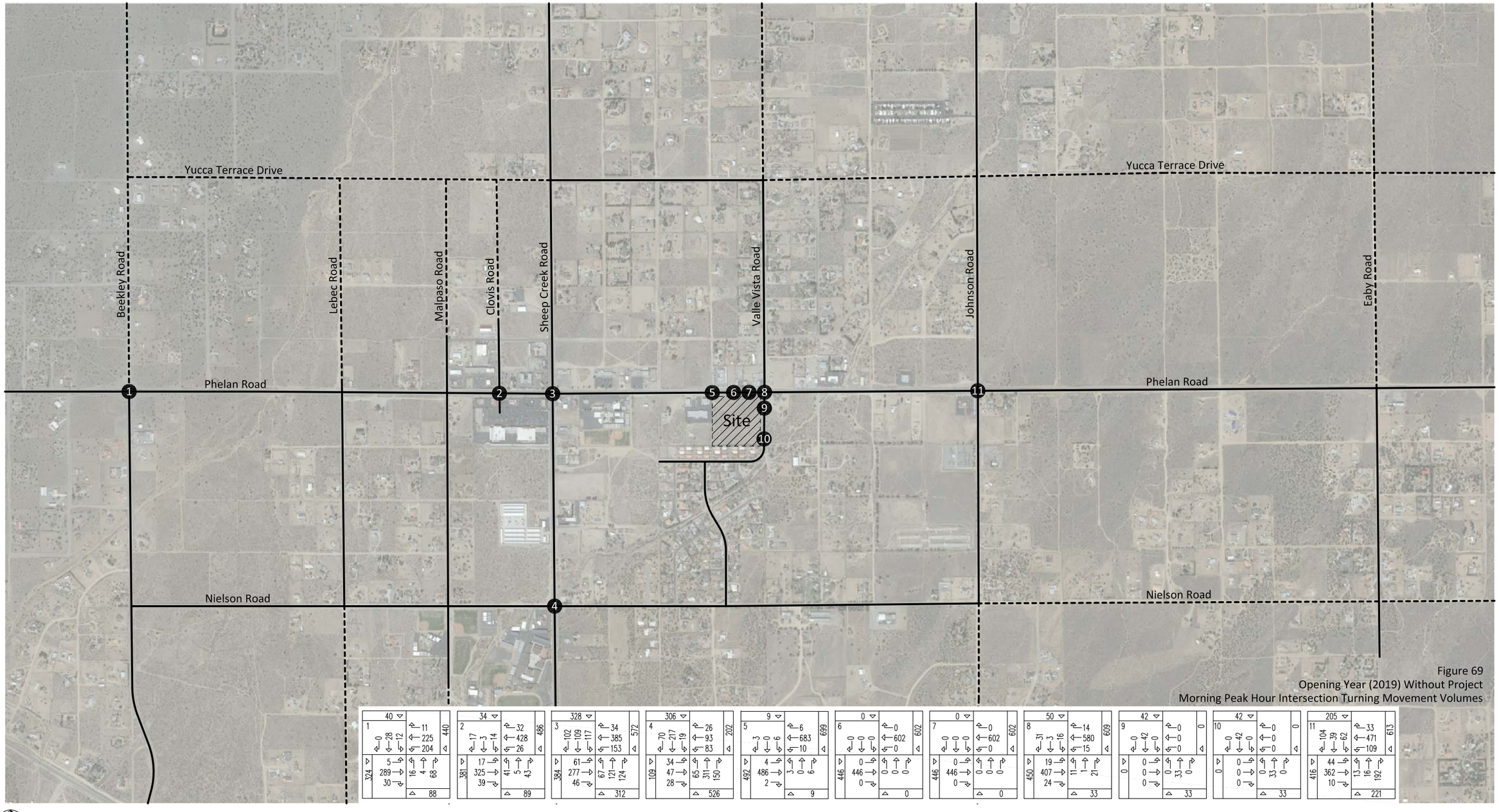


Figure 69
Opening Year (2019) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 70
Opening Year (2019) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

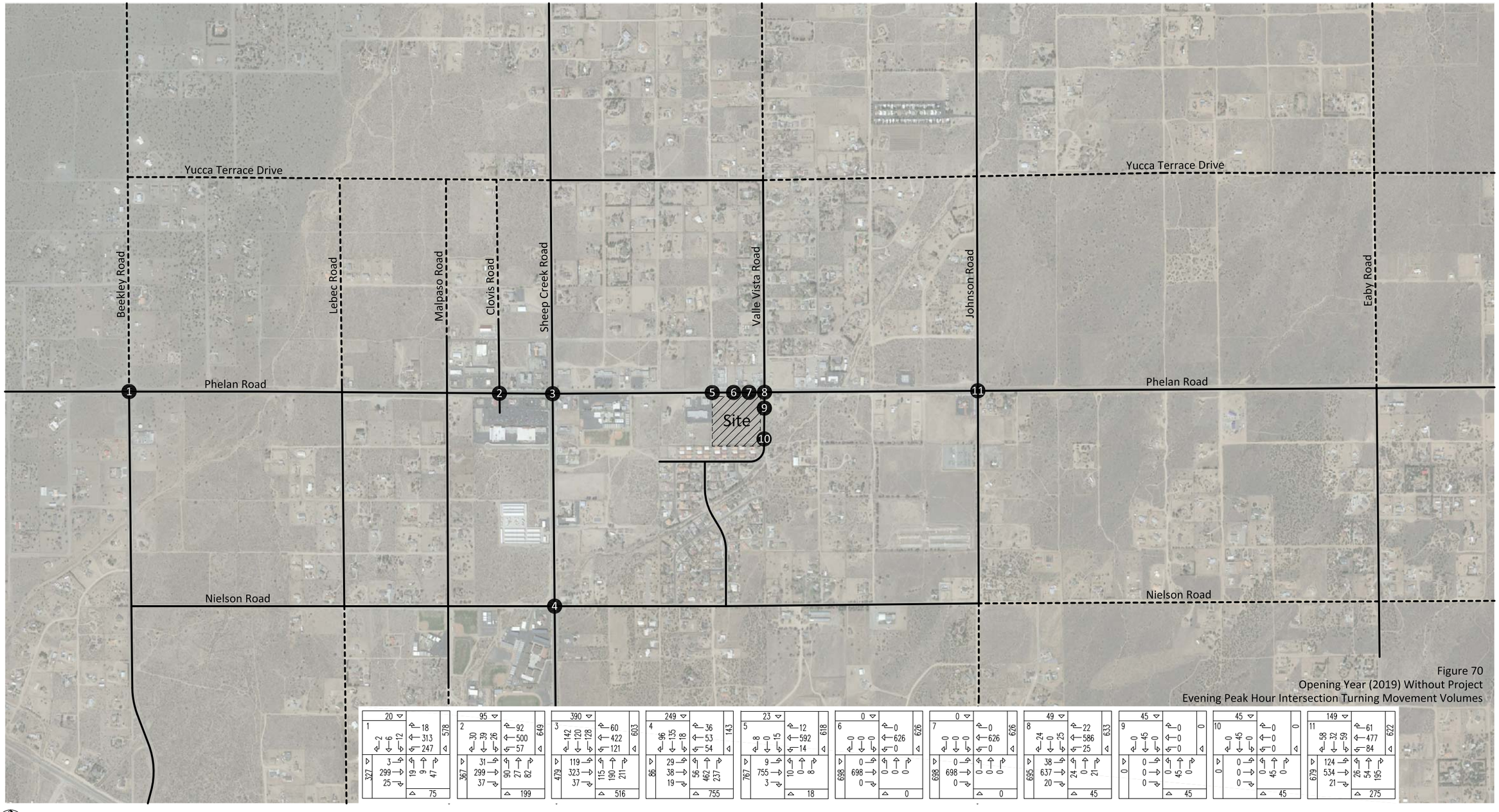


Figure 70
Opening Year (2019) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 71
Opening Year (2019) With Project
Morning Peak Hour Intersection Turning Movement Volumes

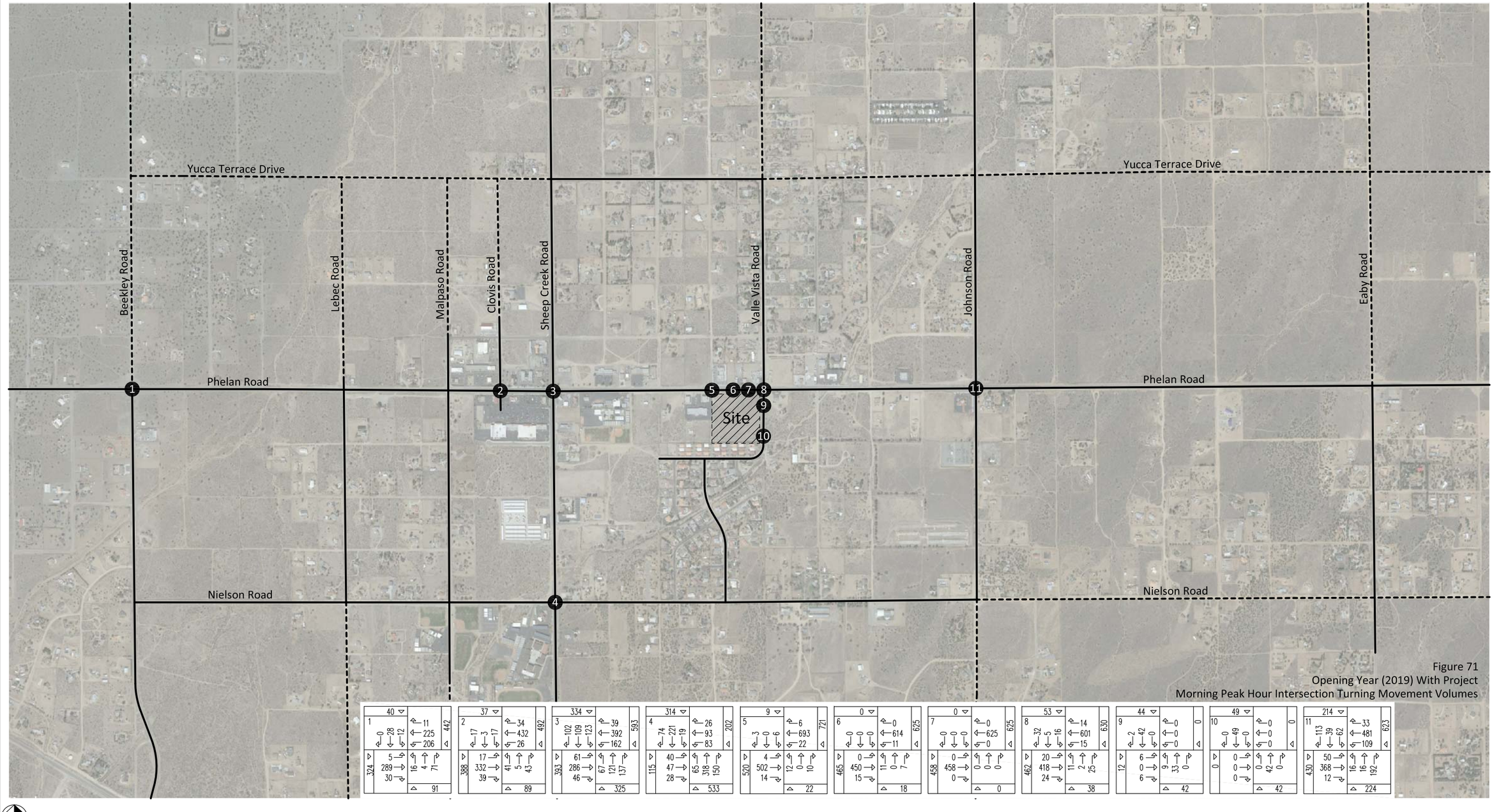


Figure 71
Opening Year (2019) With Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 72
Opening Year (2019) With Project
Evening Peak Hour Intersection Turning Movement Volumes

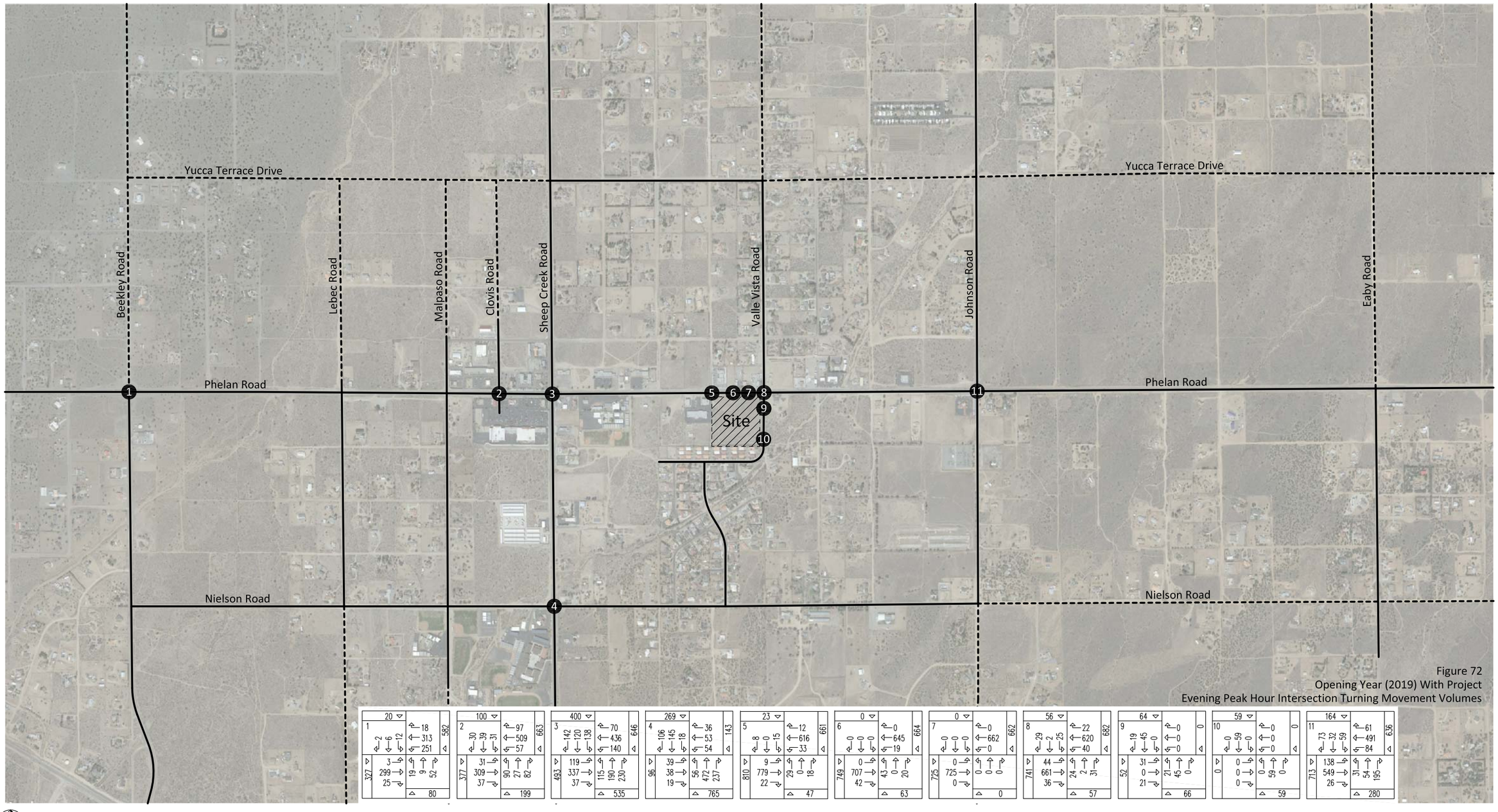


Figure 72
Opening Year (2019) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 73
Opening Year (2020) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

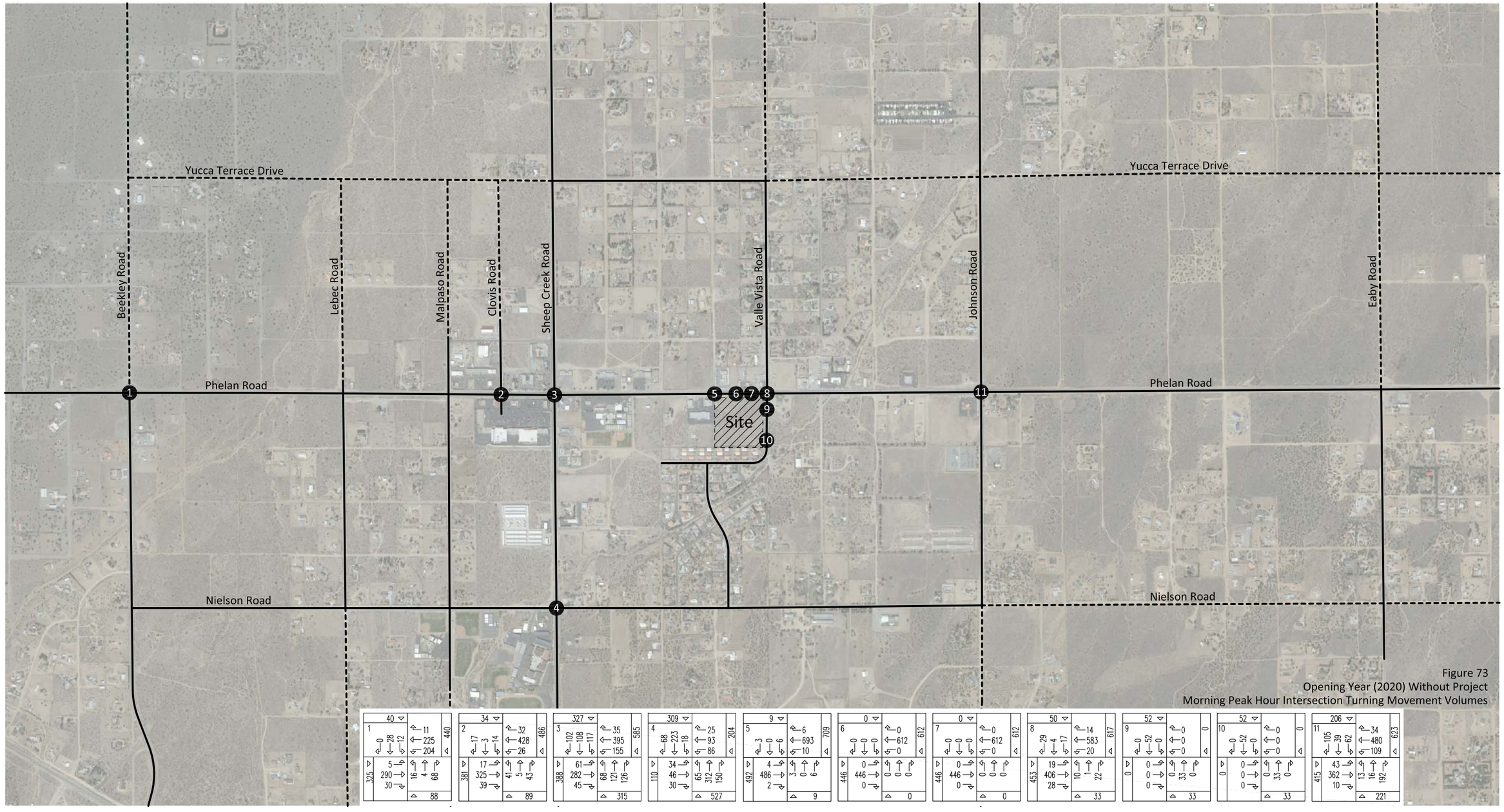


Figure 73
Opening Year (2020) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

JN 5868a

Figure 74
Opening Year (2020) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

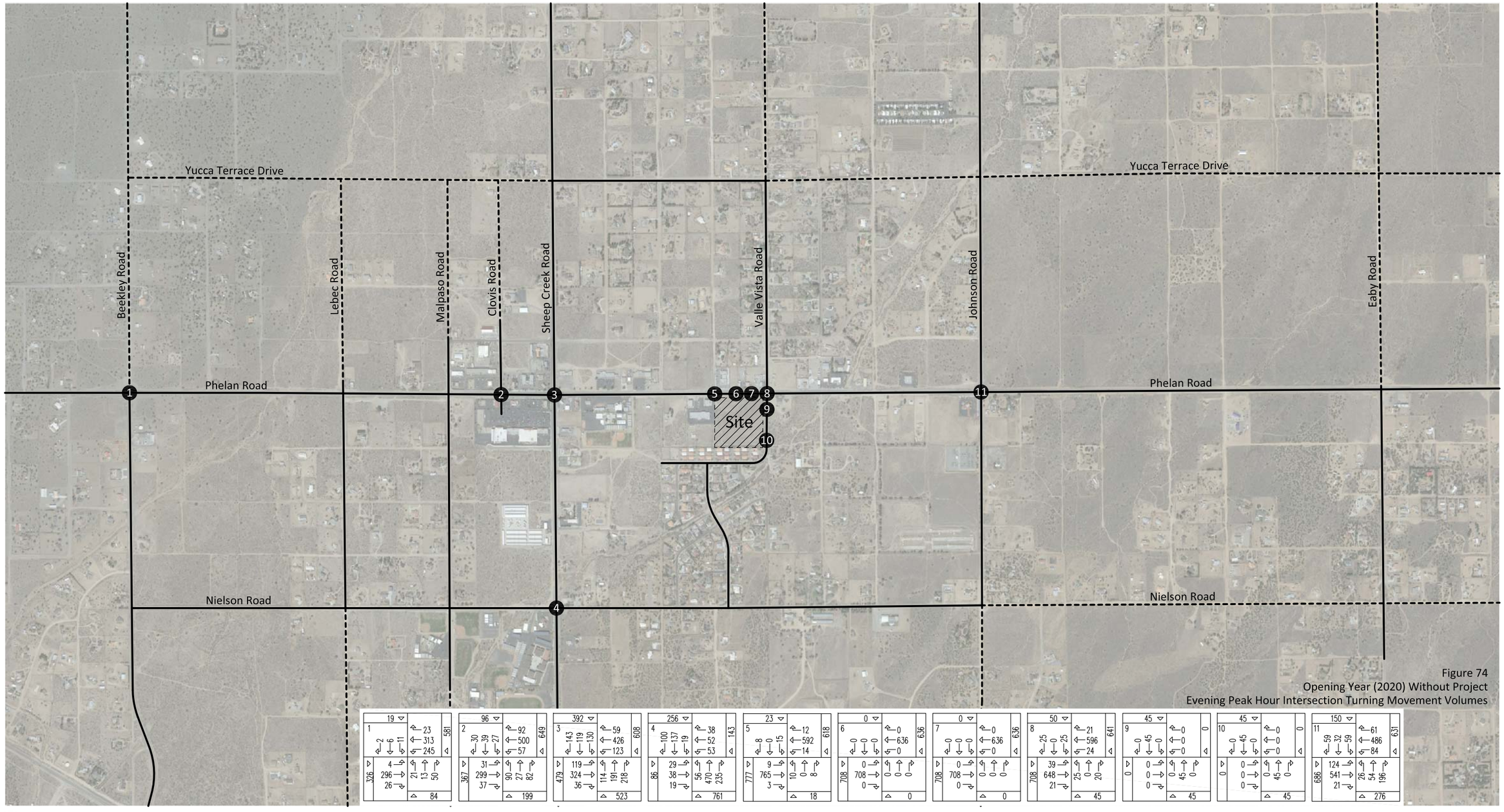


Figure 74
Opening Year (2020) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 75
Opening Year (2020) With Project
Morning Peak Hour Intersection Turning Movement Volumes

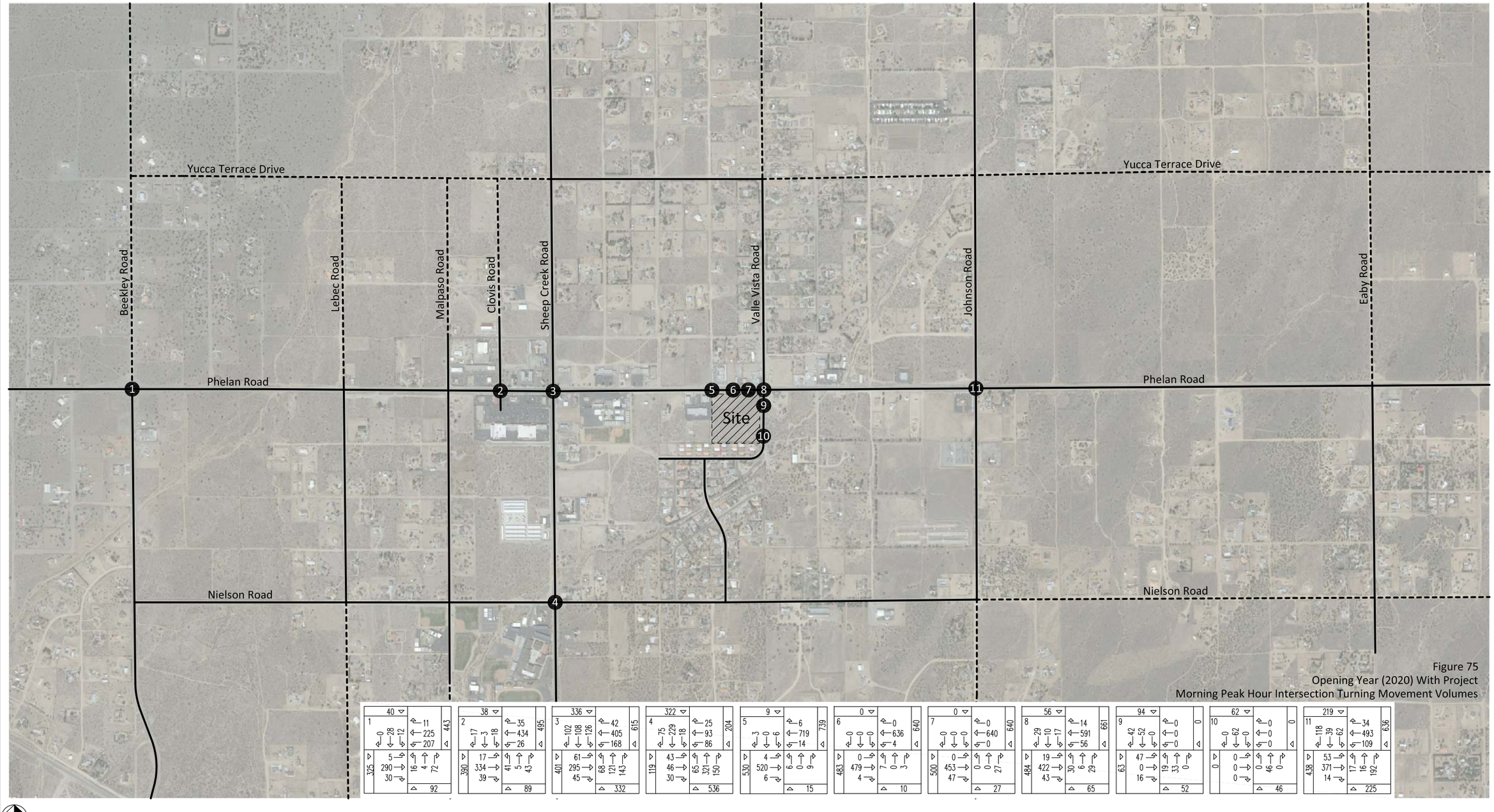


Figure 75
Opening Year (2020) With Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 76
Opening Year (2020) With Project
Evening Peak Hour Intersection Turning Movement Volumes

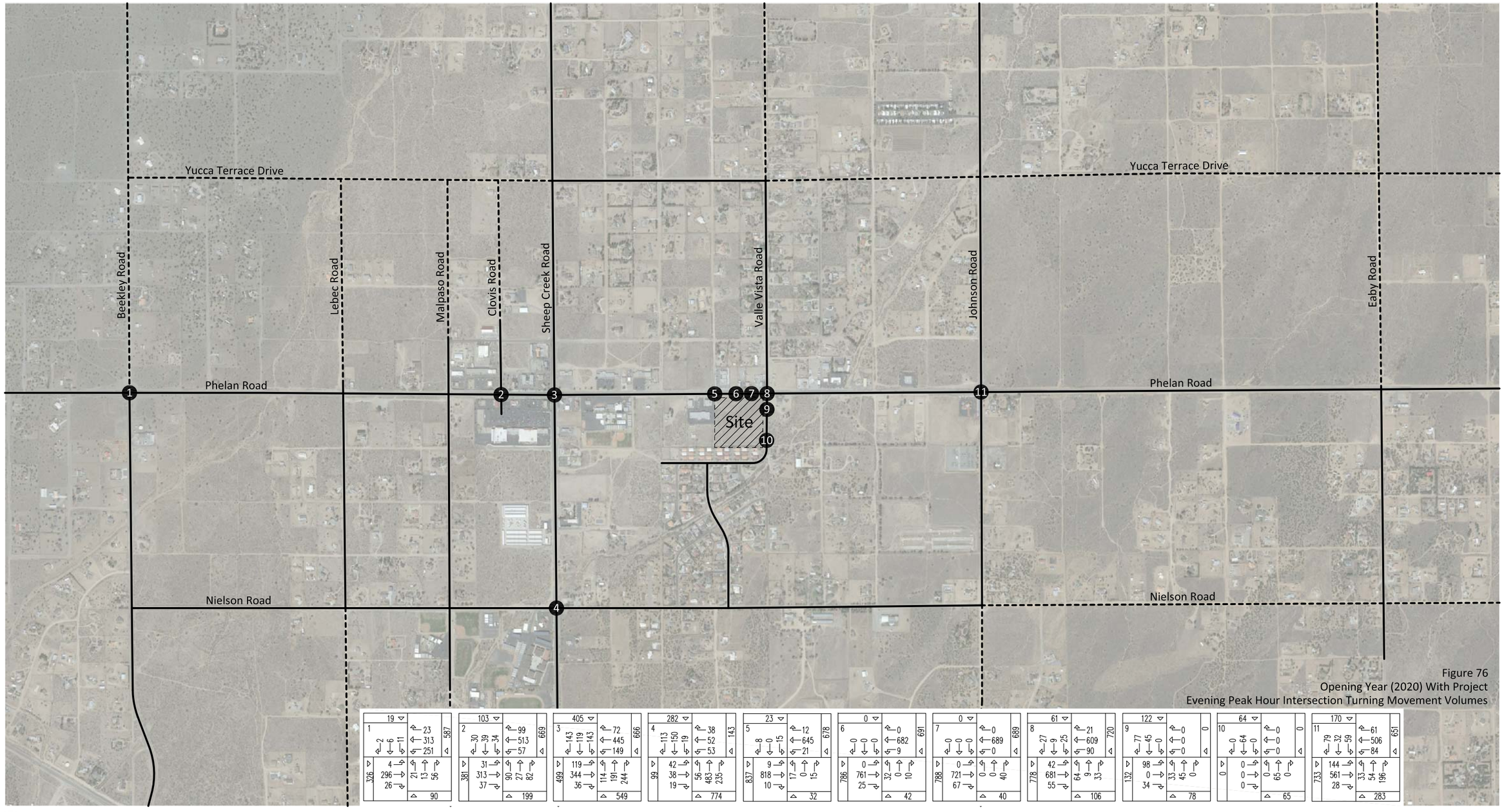


Figure 76
Opening Year (2020) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 77
Opening Year (2021) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

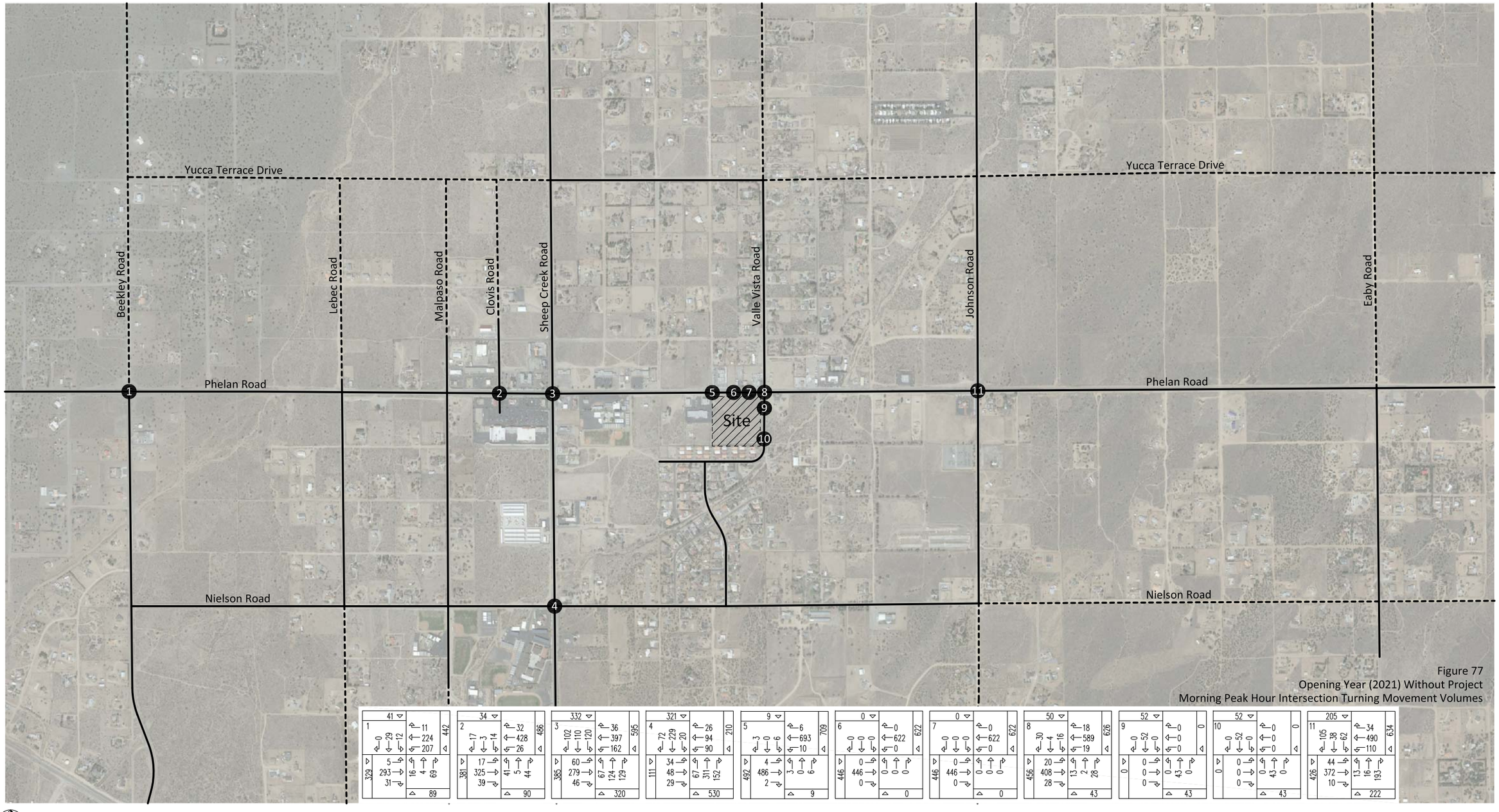


Figure 77
Opening Year (2021) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 78
Opening Year (2021) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

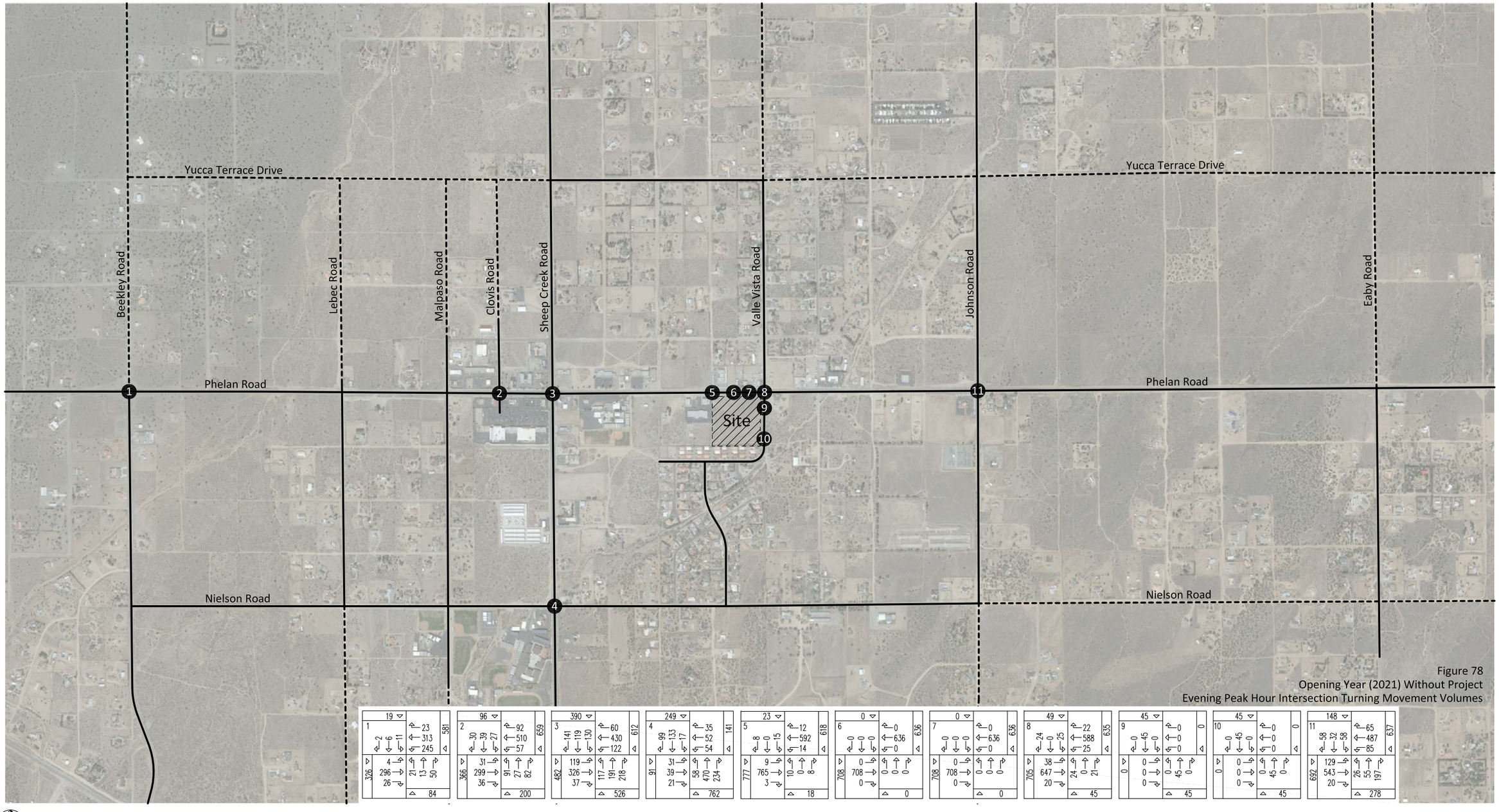


Figure 78
Opening Year (2021) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 79
Opening Year (2021) With Project
Morning Peak Hour Intersection Turning Movement Volumes

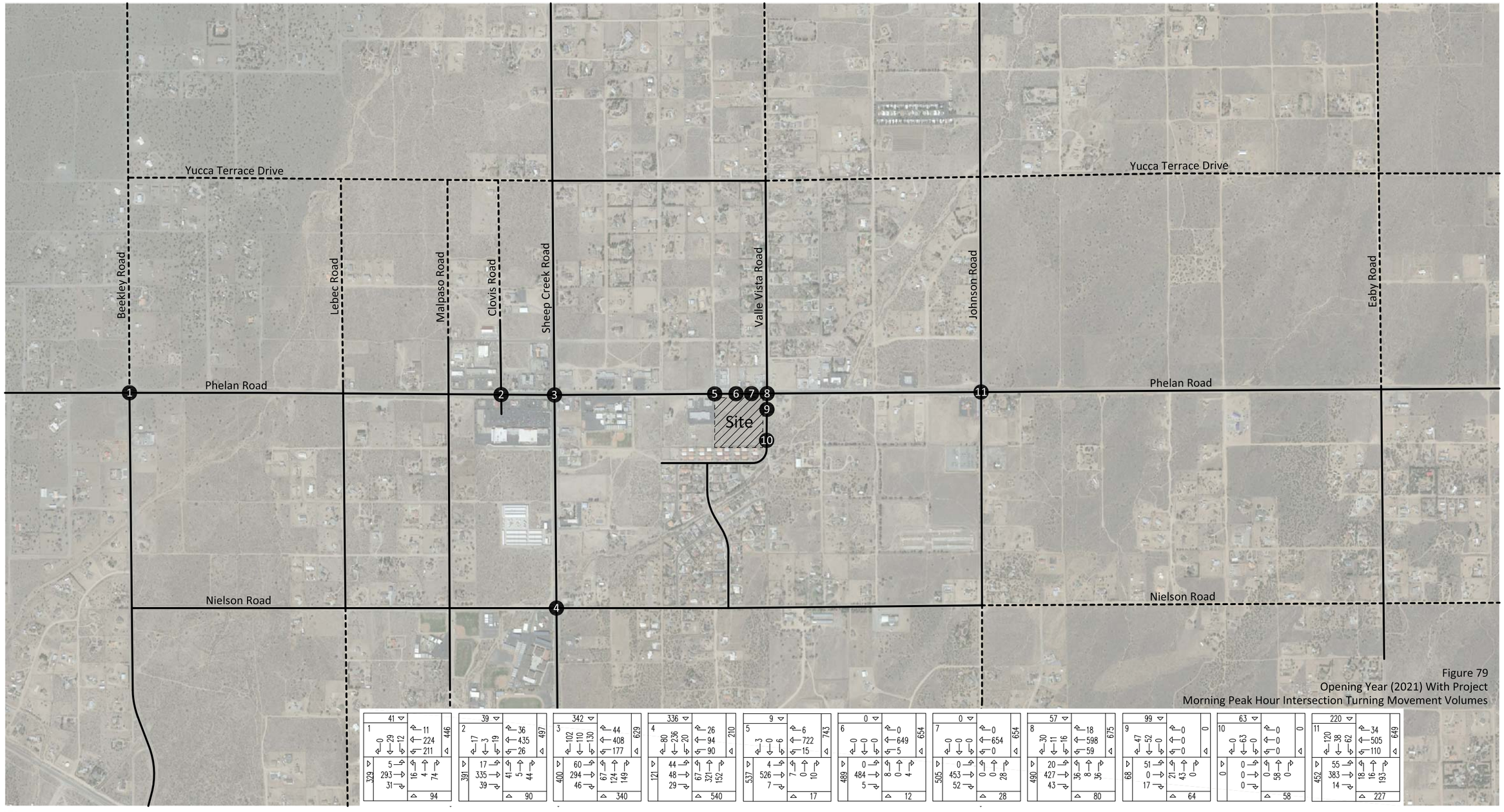


Figure 79
Opening Year (2021) With Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 80
Opening Year (2021) With Project
Evening Peak Hour Intersection Turning Movement Volumes

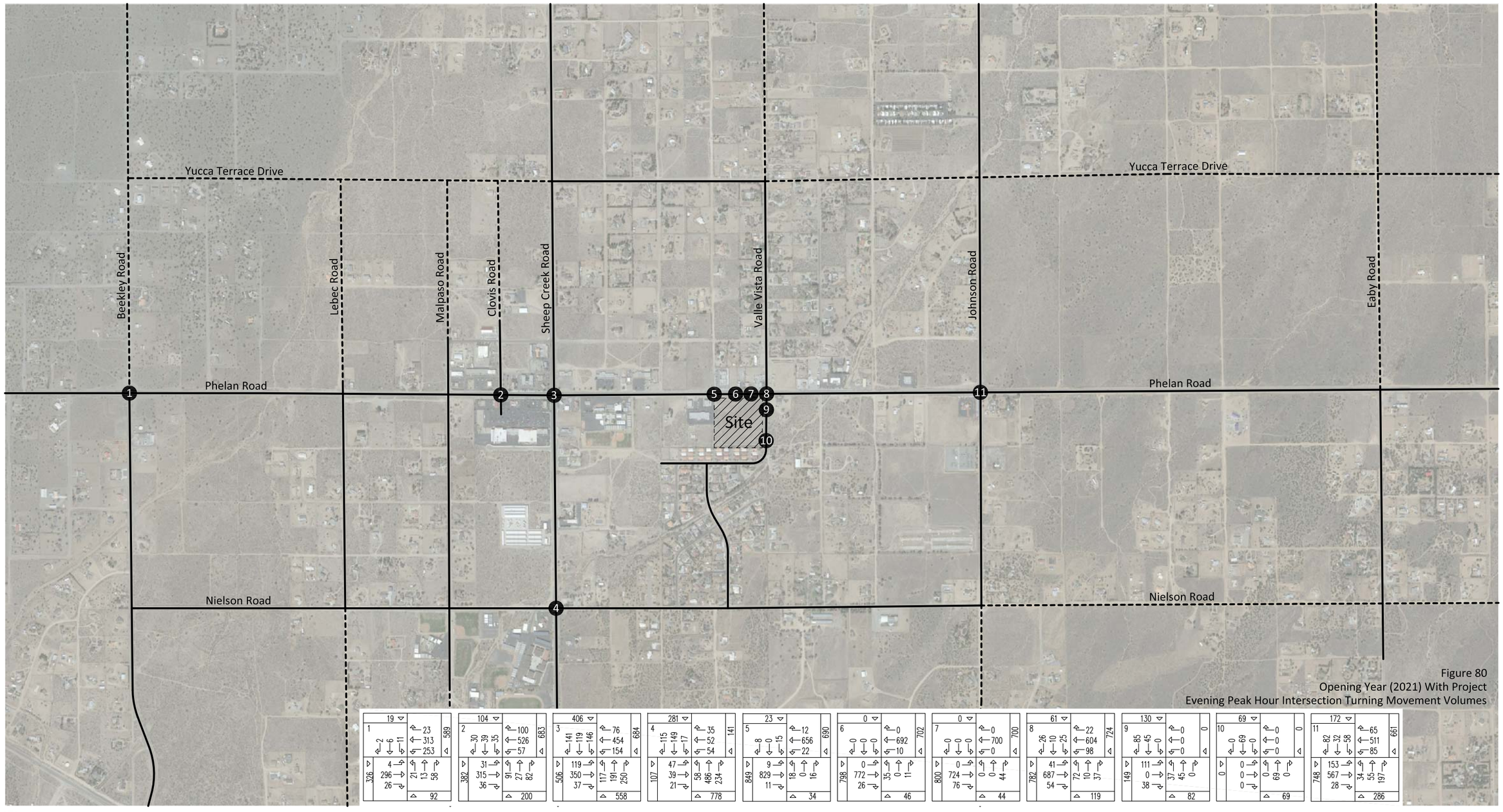


Figure 80
Opening Year (2021) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 81
Opening Year (2022) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

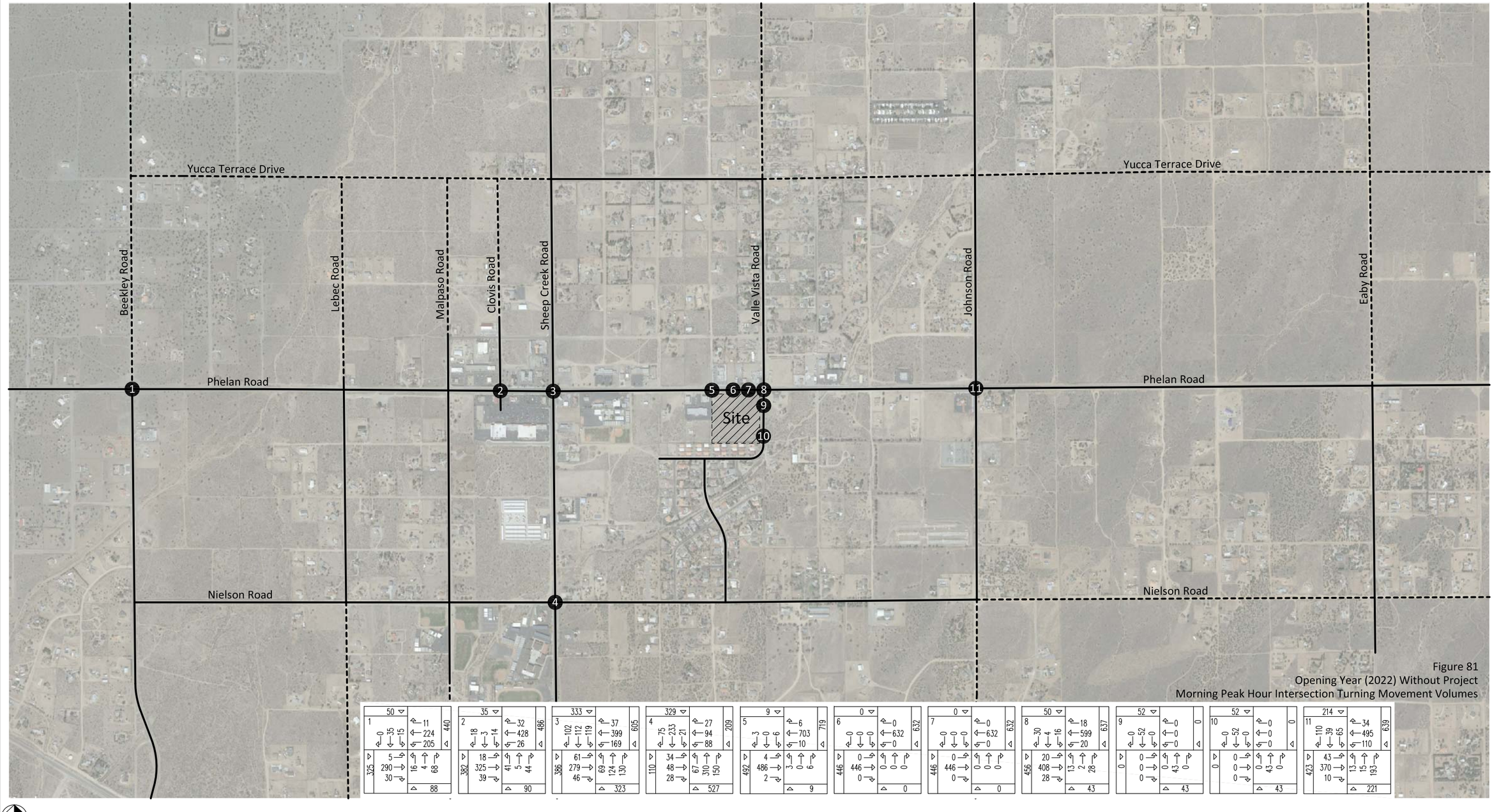


Figure 81
Opening Year (2022) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

1	2	3	4	5	6	7	8	9	10	11
50	35	333	329	9	0	0	50	52	52	214
0	18	102	75	3	0	0	30	0	0	110
35	3	112	233	0	0	0	4	52	52	39
15	14	119	21	6	6	0	16	0	0	65
11	32	37	27	6	0	0	18	0	0	34
224	428	399	94	703	632	632	599	0	0	495
205	26	169	88	10	0	0	20	0	0	110
440	486	605	209	719	632	632	637	0	0	639
5	18	61	34	4	0	0	20	0	0	43
290	325	279	48	486	446	446	408	0	0	370
30	39	46	28	2	0	0	28	0	0	10
16	41	69	67	3	0	0	13	0	0	13
4	5	124	310	0	0	0	2	43	43	15
68	44	130	150	6	0	0	28	0	0	193
325	382	386	110	492	446	446	456	0	0	423
88	90	323	527	9	0	0	43	43	43	221

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 82
Opening Year (2022) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

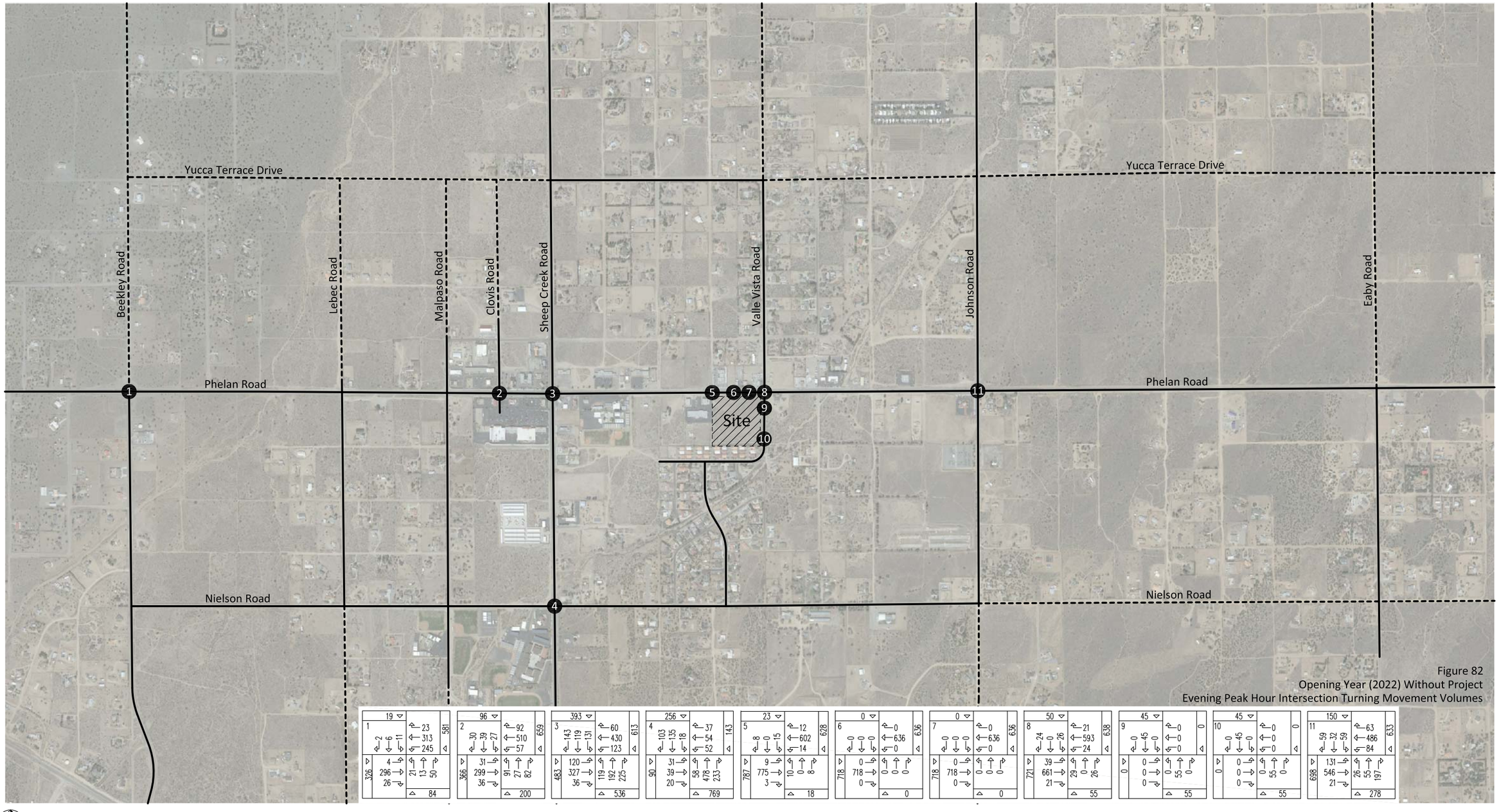


Figure 82
Opening Year (2022) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 83
Opening Year (2022) With Project
Morning Peak Hour Intersection Turning Movement Volumes

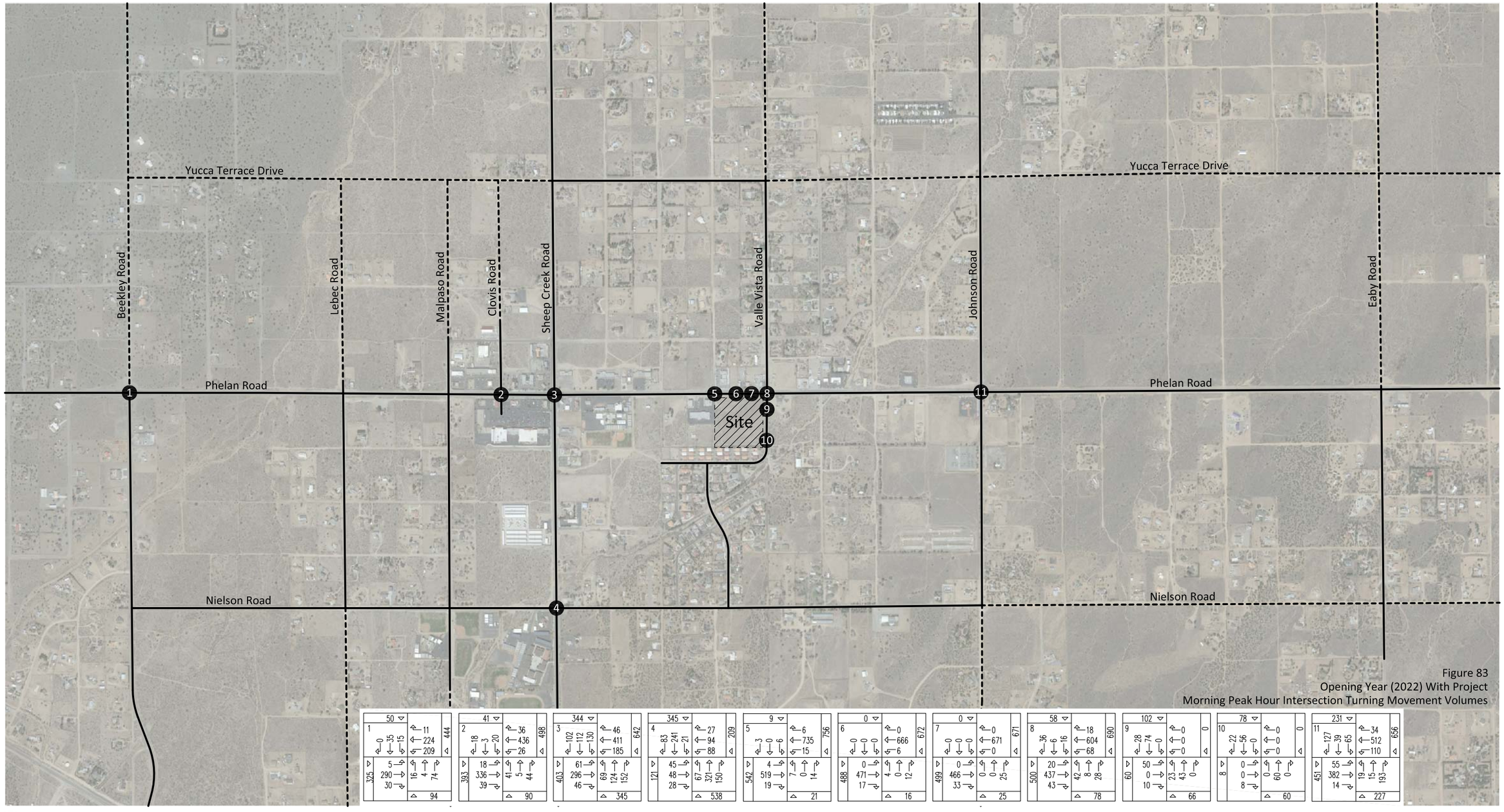


Figure 83
Opening Year (2022) With Project
Morning Peak Hour Intersection Turning Movement Volumes

1	2	3	4	5	6	7	8	9	10	11
50	41	344	345	9	0	0	58	102	78	231
0	18	102	83	3	0	0	36	28	22	127
35	3	112	241	0	0	0	6	74	56	39
15	20	130	21	6	0	0	16	0	0	65
11	36	46	27	6	0	0	18	0	0	34
224	436	411	94	735	666	671	604	0	0	512
209	26	185	88	15	6	0	68	0	0	110
444	498	642	209	756	672	671	690	0	0	656
5	18	61	45	4	0	0	20	50	0	55
290	336	296	48	519	471	466	437	0	0	382
30	39	46	28	19	17	33	43	10	8	14
16	41	69	67	7	0	0	42	23	0	19
4	5	124	321	0	4	0	8	43	60	15
74	44	152	150	14	12	25	28	0	0	193
325	393	403	121	542	488	499	500	60	8	451
94	90	345	538	21	16	25	78	66	60	227

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 84
Opening Year (2022) With Project
Evening Peak Hour Intersection Turning Movement Volumes

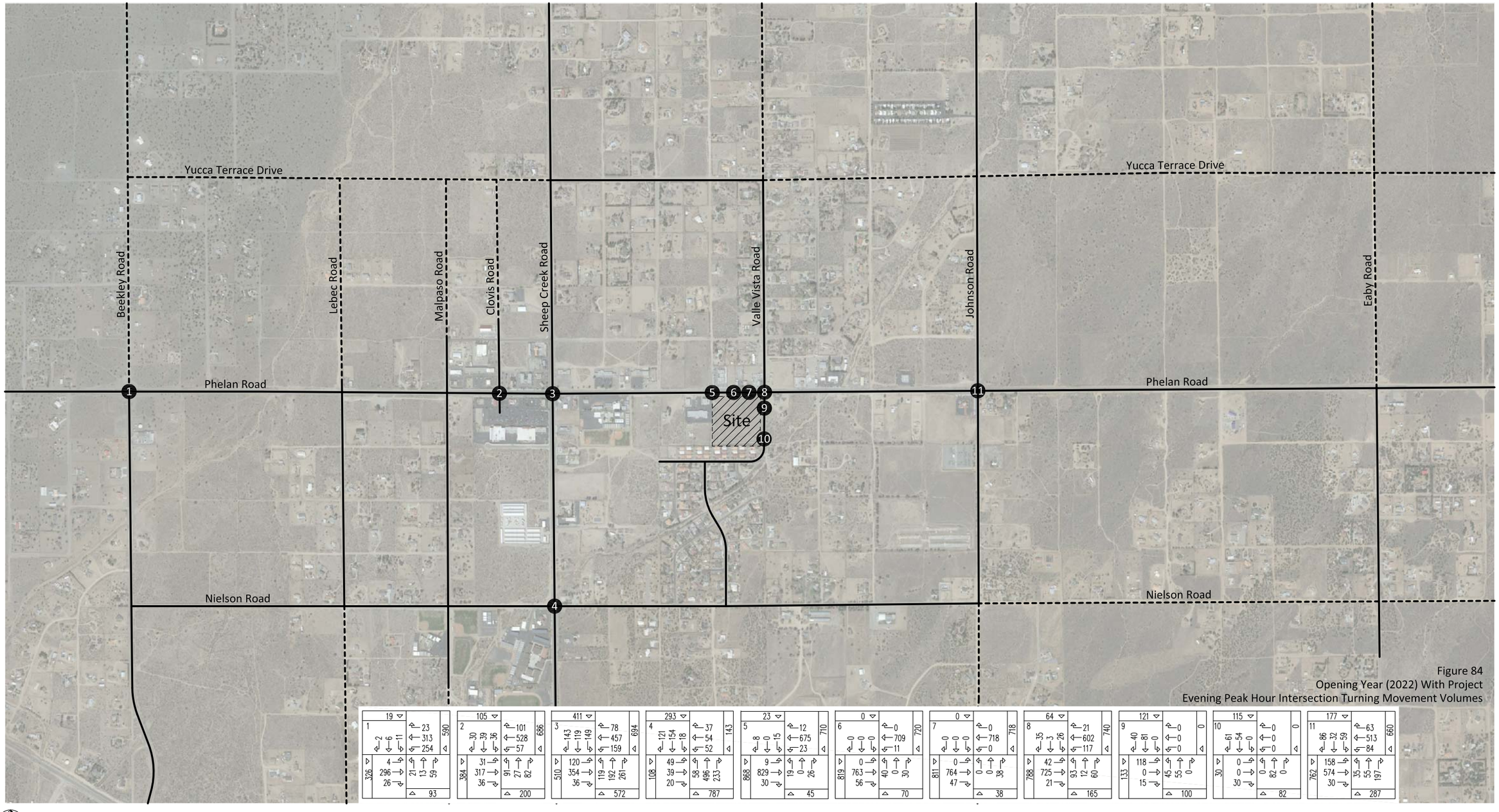


Figure 84
Opening Year (2022) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 85
Opening Year (2023) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

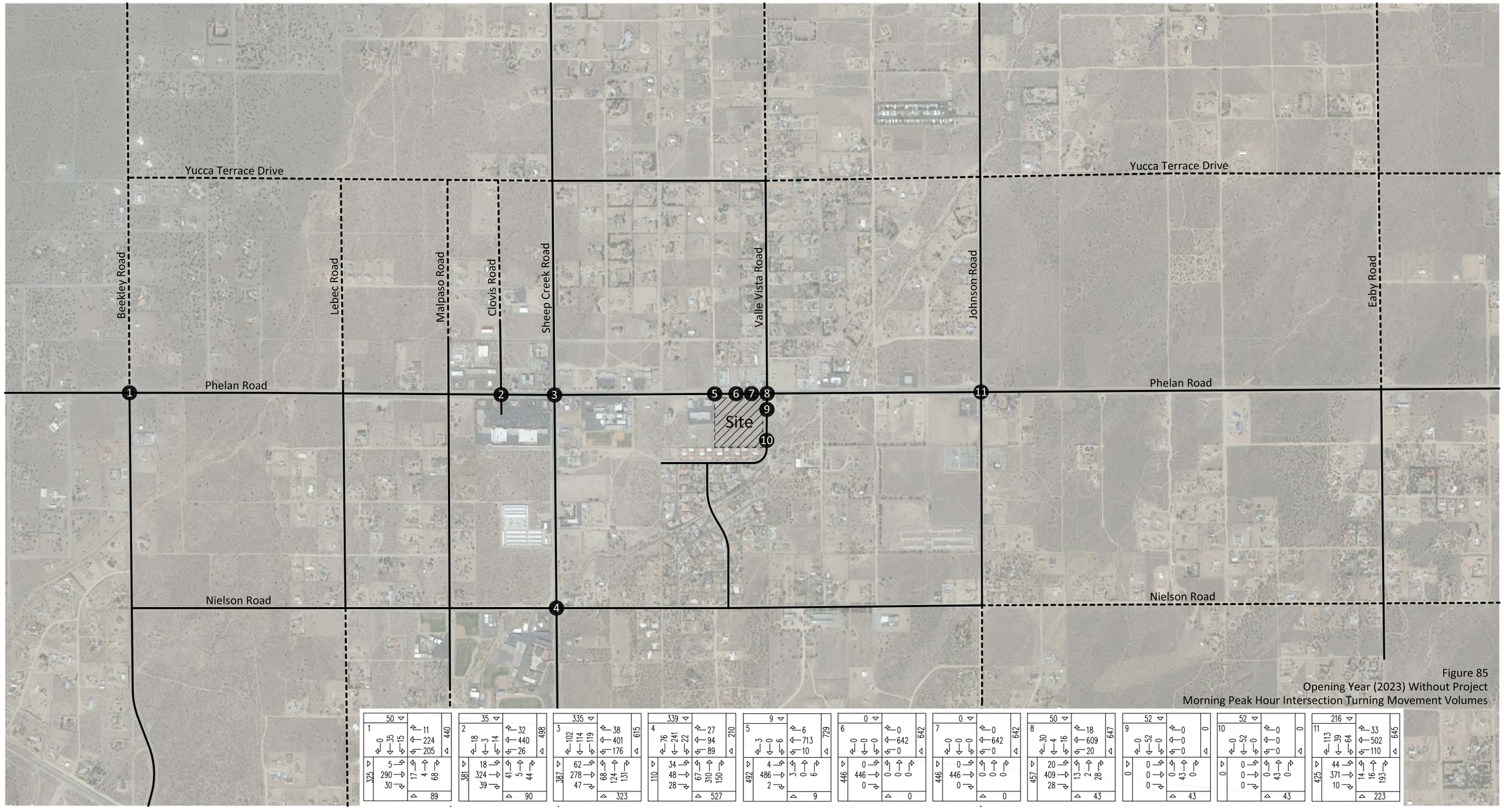


Figure 85
Opening Year (2023) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 86
Opening Year (2023) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

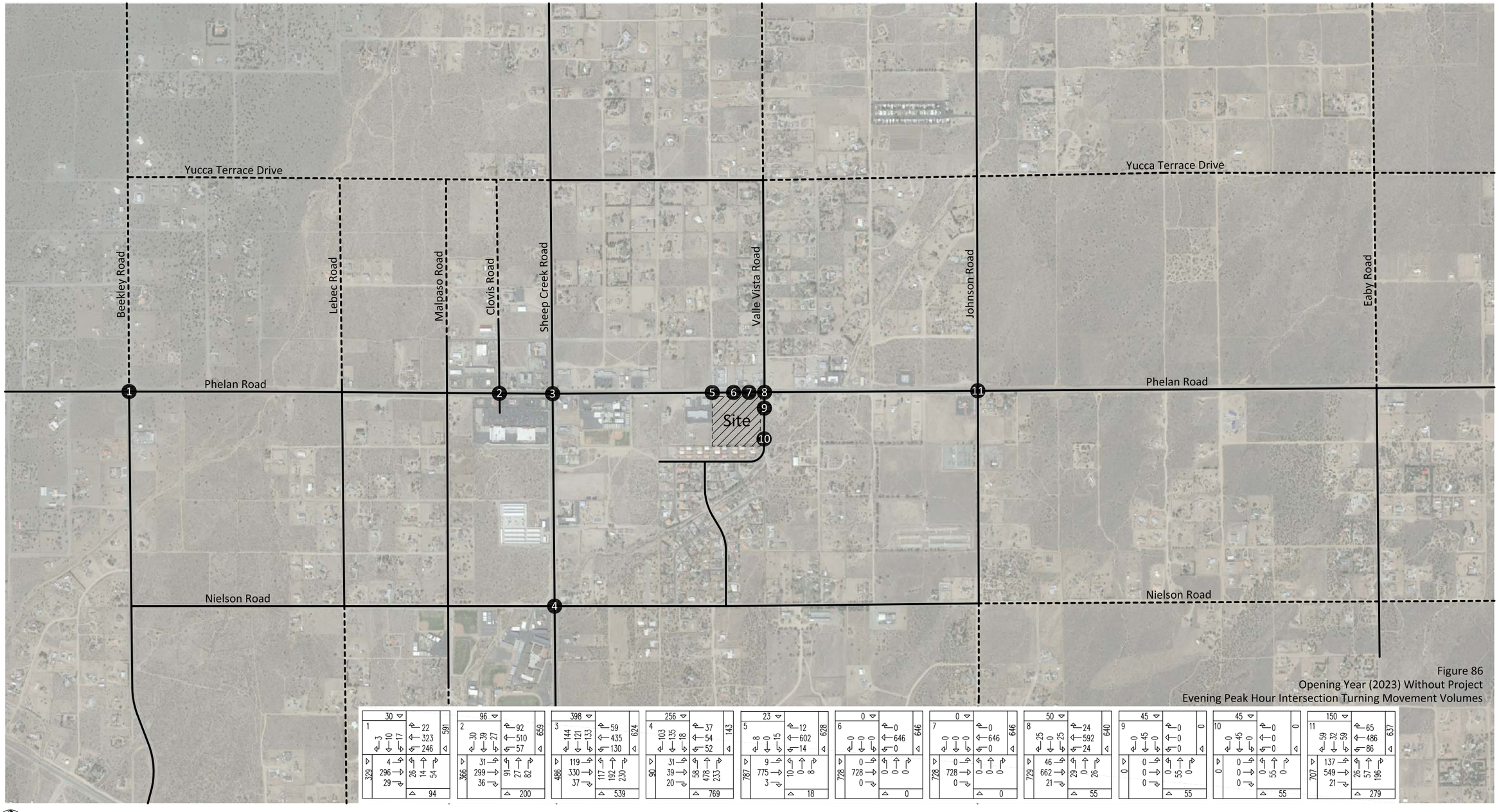


Figure 86
Opening Year (2023) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

1	2	3	4	5	6	7	8	9	10	11
30	96	398	256	23	0	0	50	45	45	150
3	30	144	103	8	0	0	25	0	0	59
10	39	121	135	0	0	0	25	45	45	32
17	27	133	18	15	0	0	0	0	0	59
22	92	59	37	12	0	0	24	0	0	65
323	510	435	54	602	646	646	592	0	0	486
246	57	130	52	14	0	0	24	0	0	86
591	659	624	143	628	646	646	640	0	0	637
4	31	119	31	9	0	0	46	0	0	137
296	299	330	39	775	0	0	662	0	0	549
29	36	37	20	3	0	0	21	0	0	21
329	366	486	90	787	728	728	729	0	0	707
26	91	117	58	10	0	0	29	0	55	26
14	27	192	478	0	0	0	0	0	0	57
54	82	230	233	8	0	0	26	0	0	196
94	200	539	769	18	0	0	55	55	55	279

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 87
Opening Year (2023) With Project
Morning Peak Hour Intersection Turning Movement Volumes

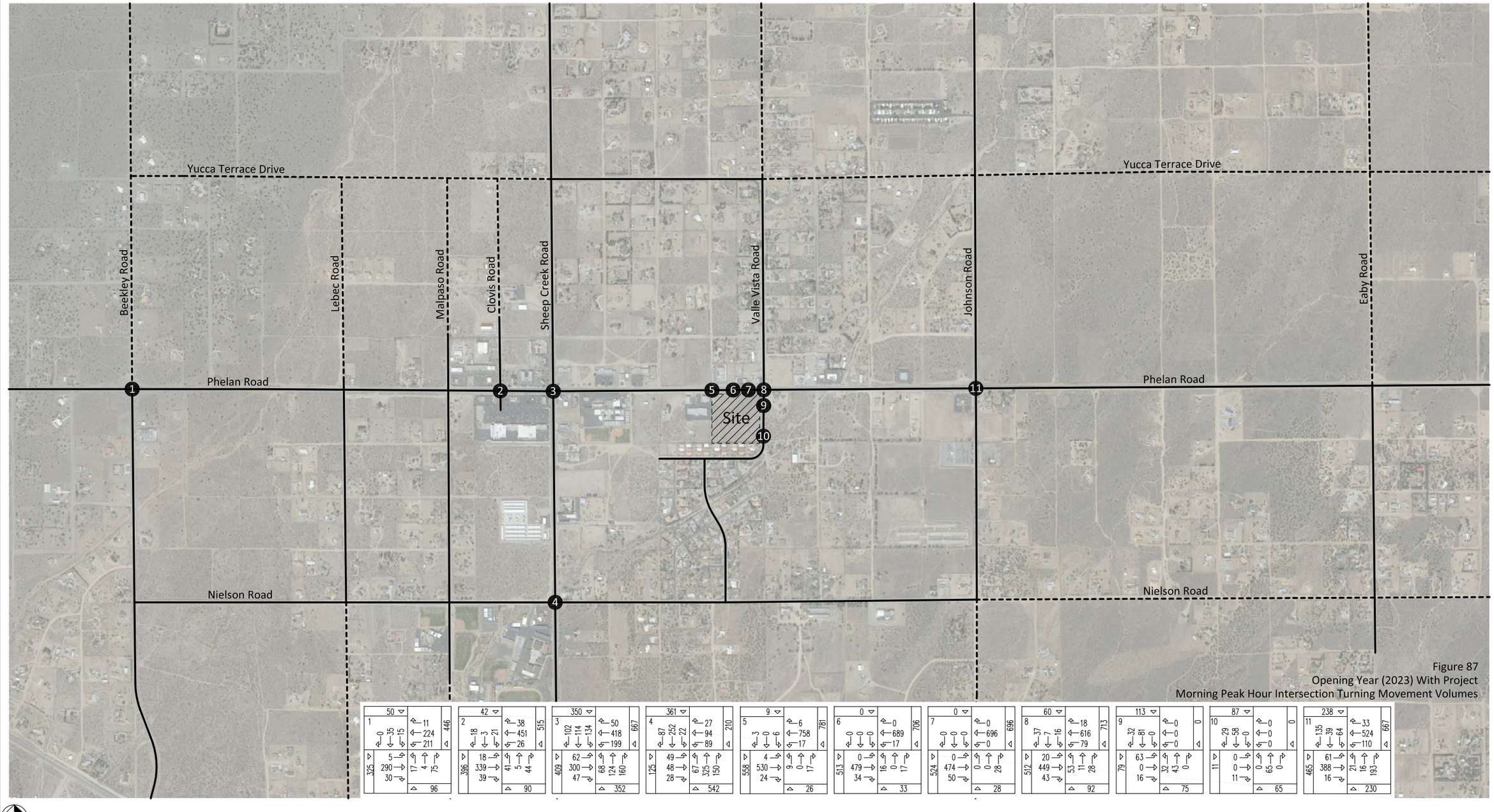


Figure 87
Opening Year (2023) With Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 88
Opening Year (2023) With Project
Evening Peak Hour Intersection Turning Movement Volumes

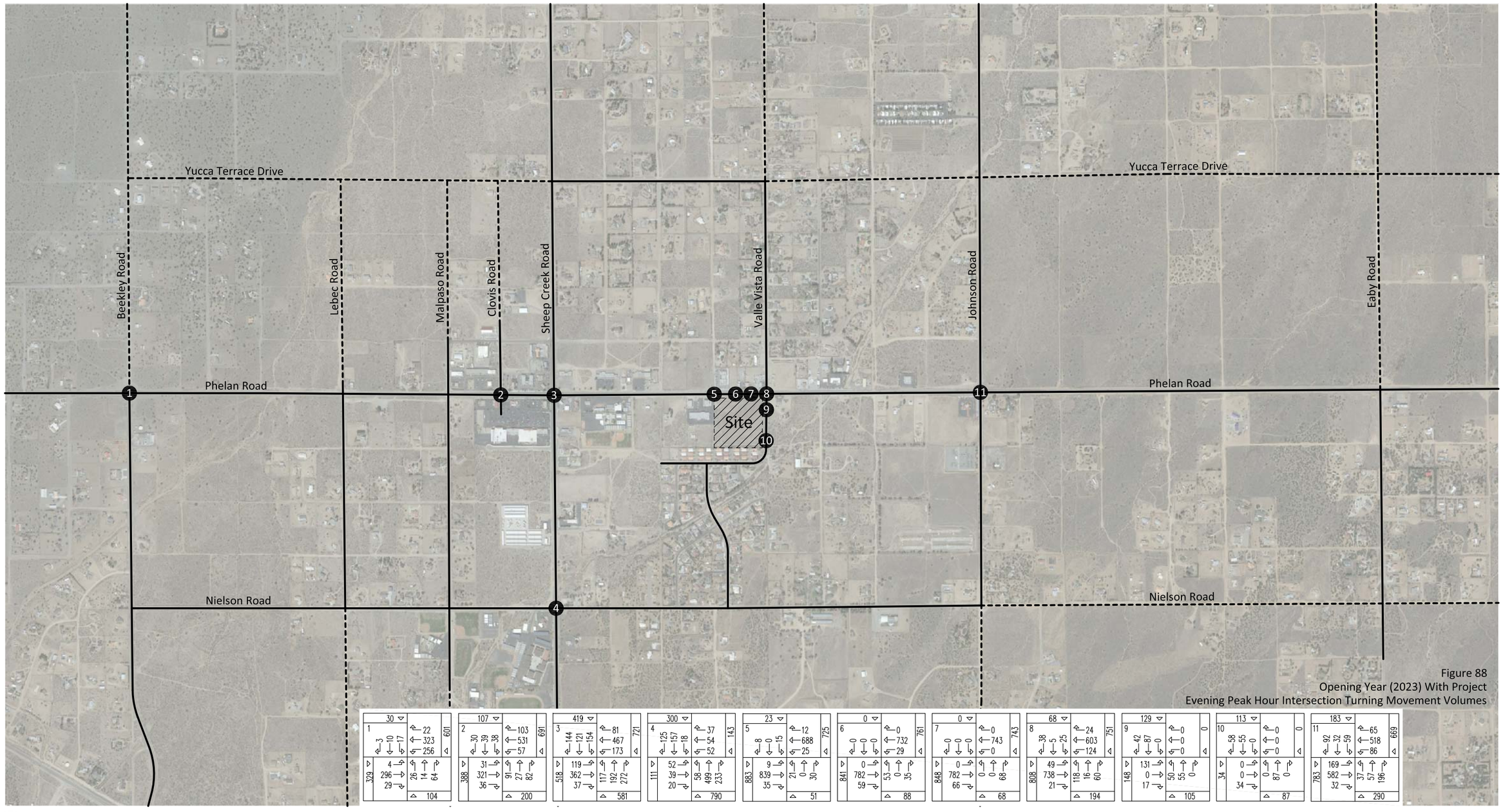


Figure 88
Opening Year (2023) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 89
Opening Year (2024) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

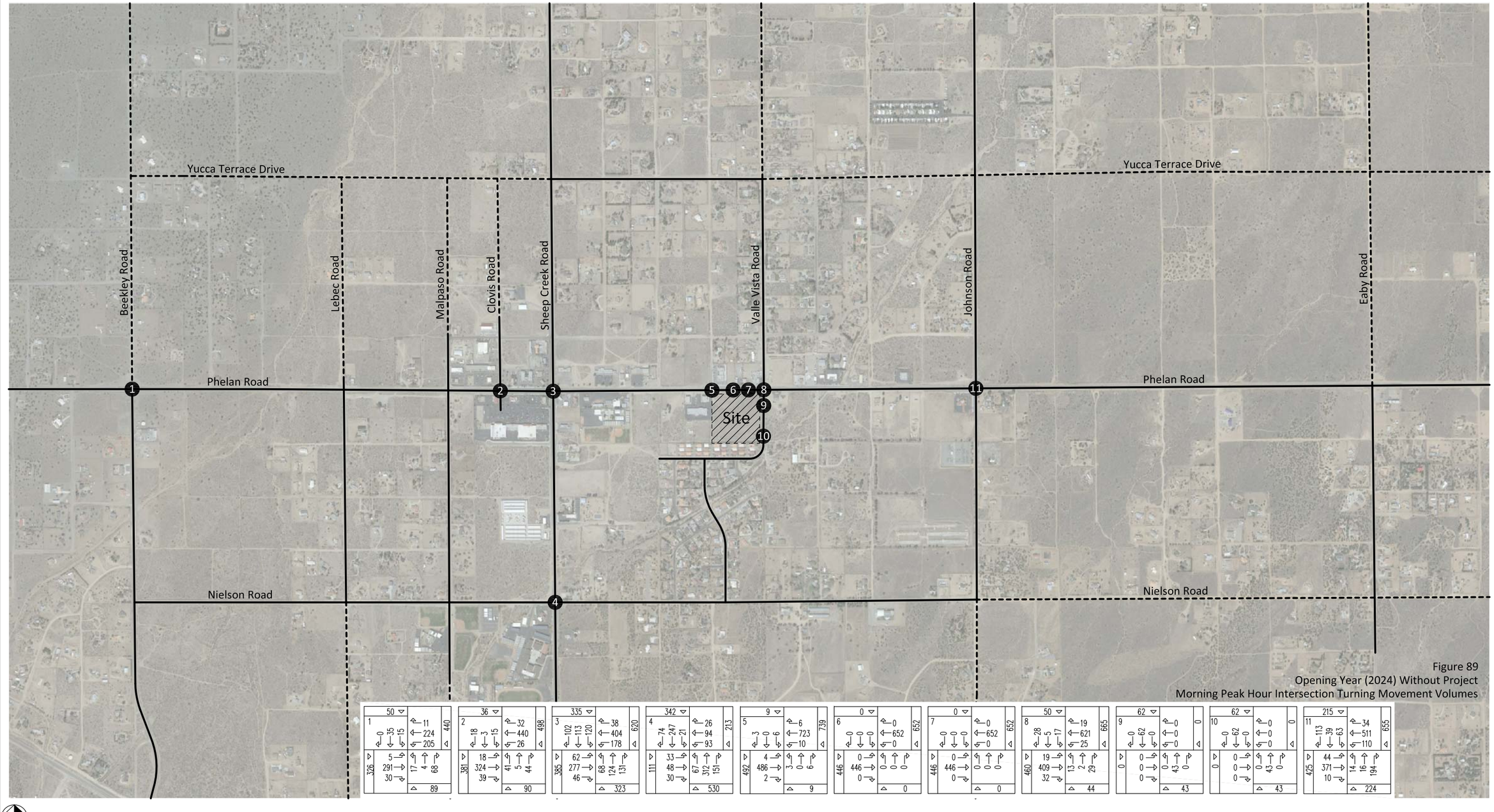


Figure 89
Opening Year (2024) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 90
Opening Year (2024) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

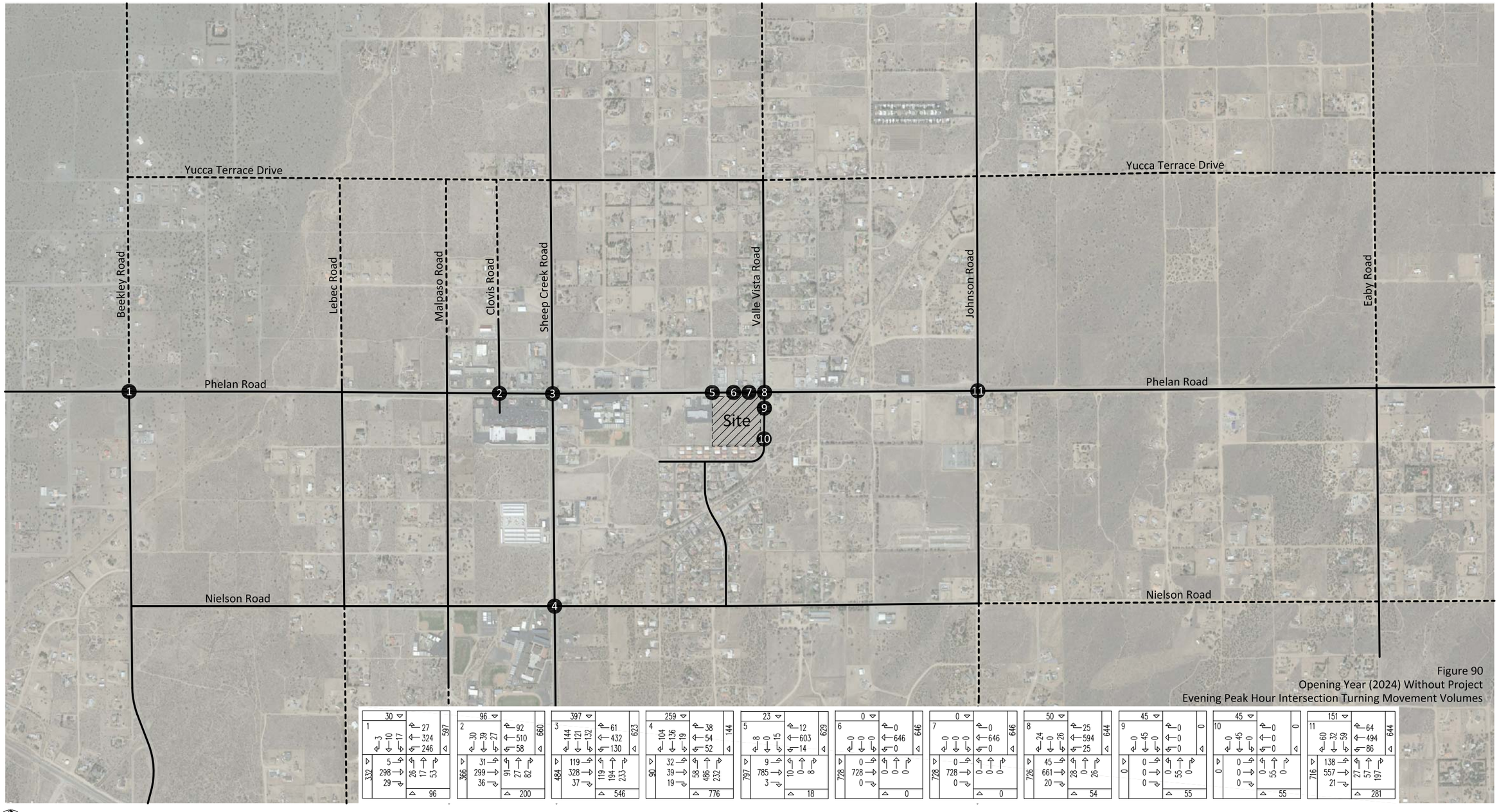


Figure 90
Opening Year (2024) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 91
Opening Year (2024) With Project
Morning Peak Hour Intersection Turning Movement Volumes

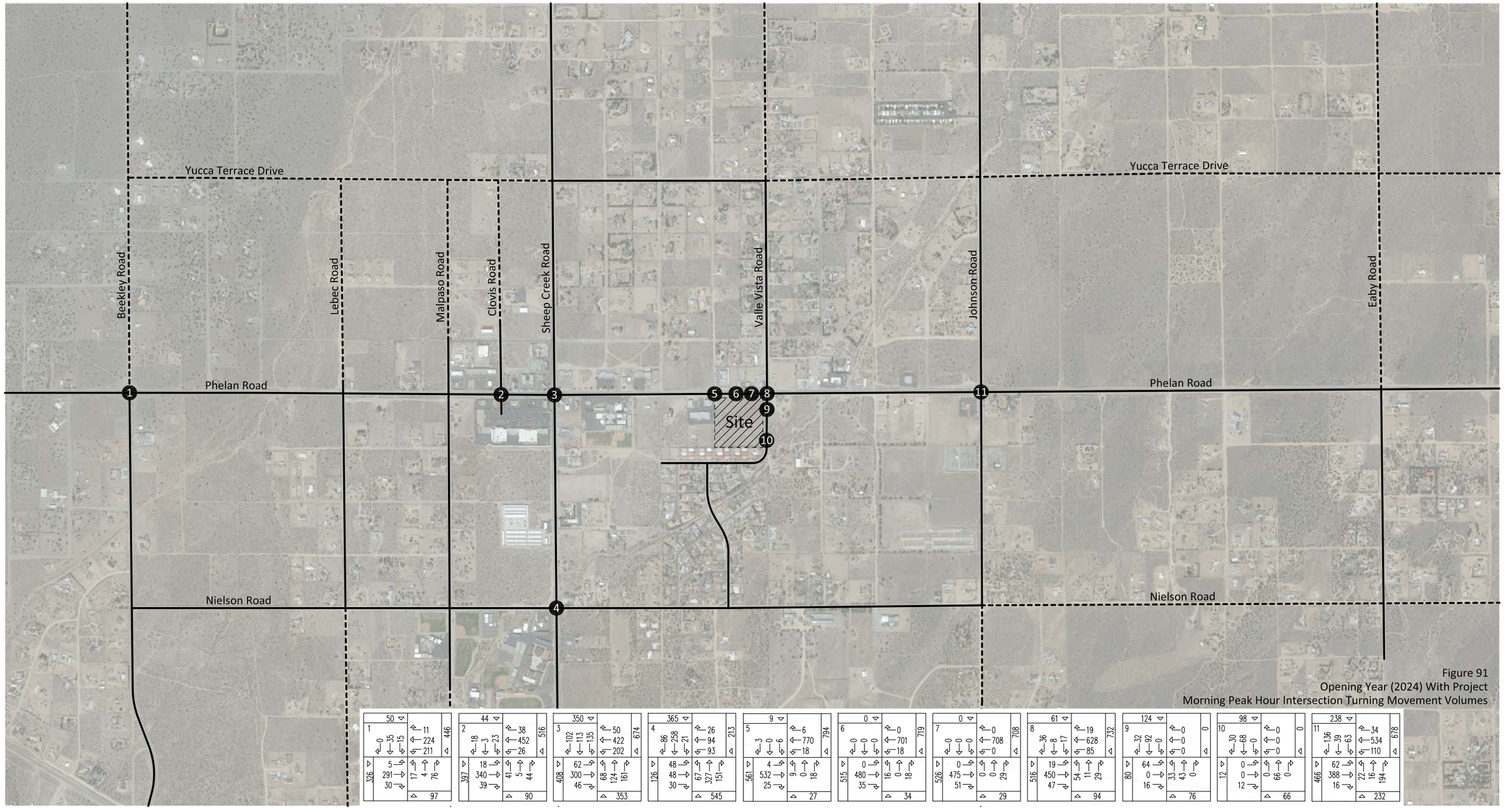


Figure 91
Opening Year (2024) With Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 92
Opening Year (2024) With Project
Evening Peak Hour Intersection Turning Movement Volumes

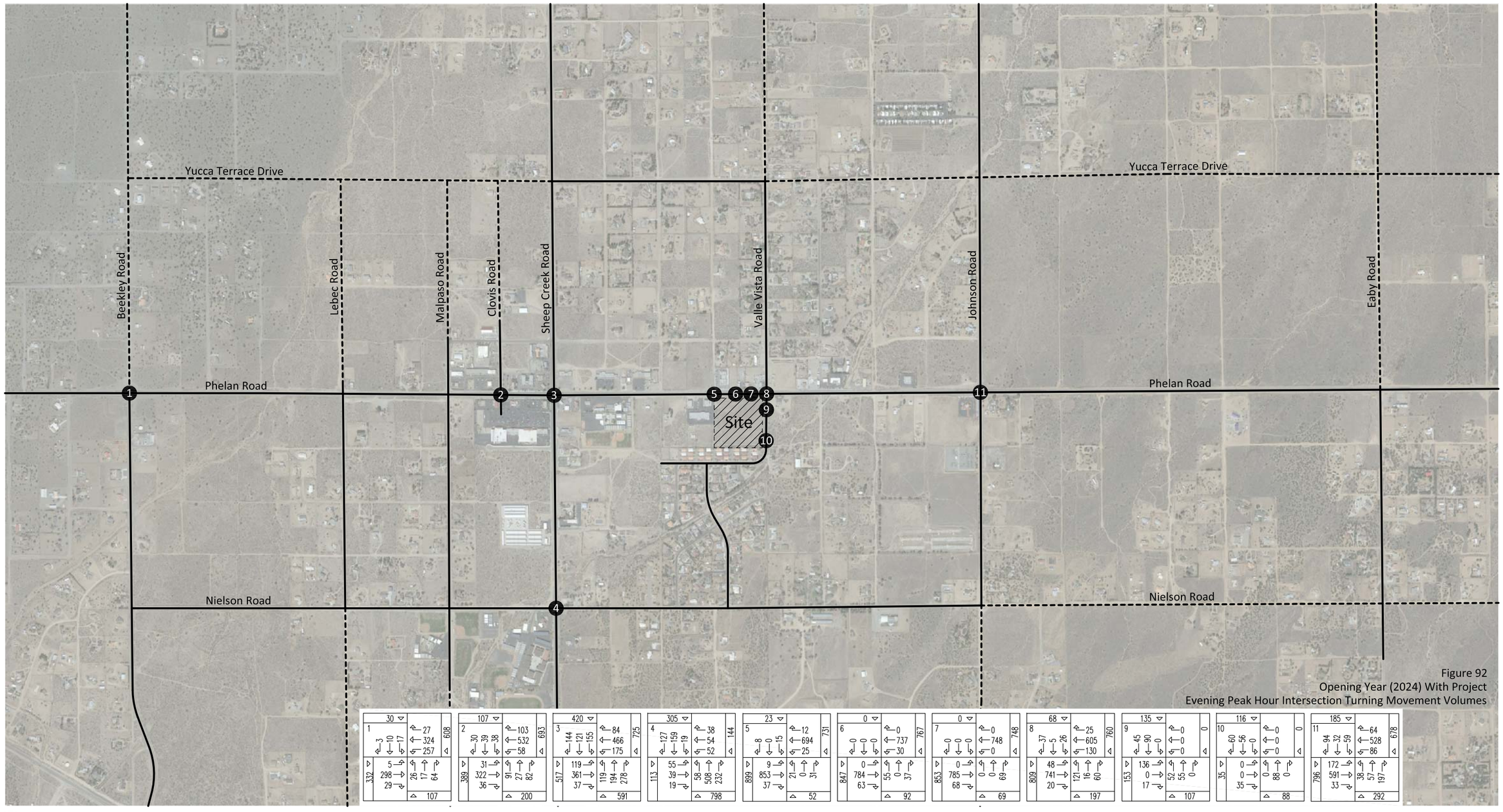


Figure 92
Opening Year (2024) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 93
Horizon Year (2035) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

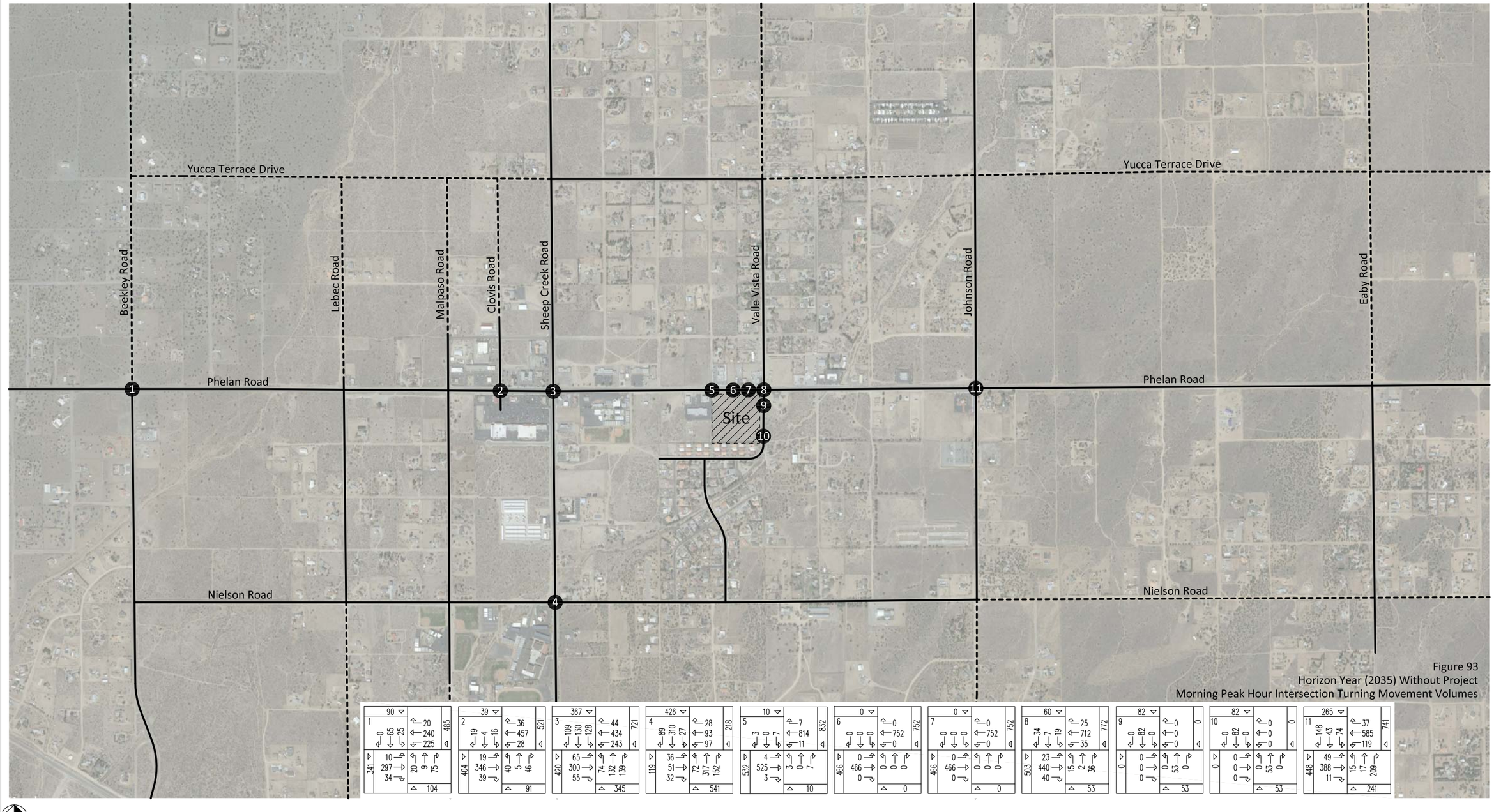


Figure 93
Horizon Year (2035) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 94
Horizon Year (2035) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

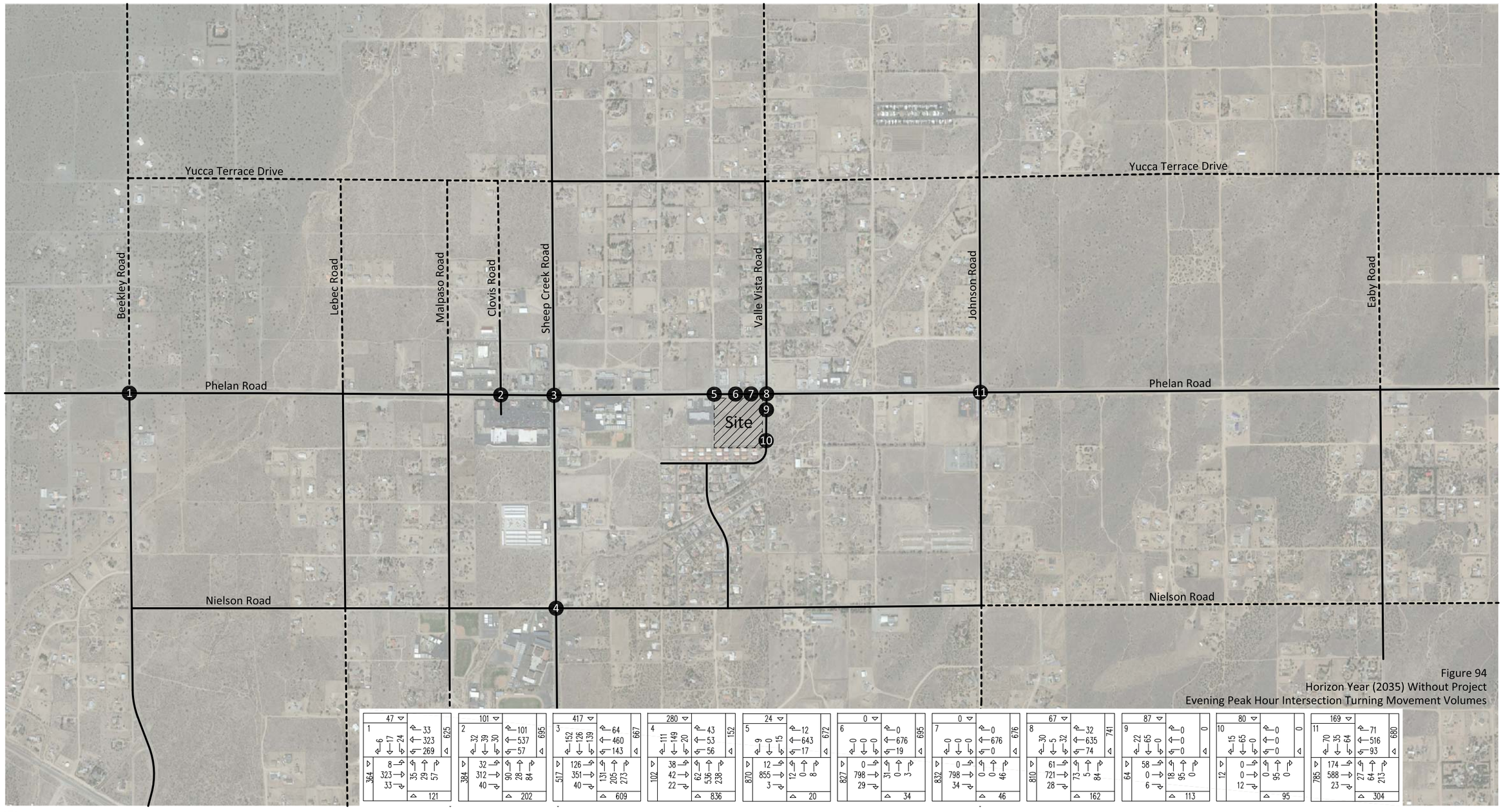


Figure 94
Horizon Year (2035) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 95
Horizon Year (2035) With Project
Morning Peak Hour Intersection Turning Movement Volumes

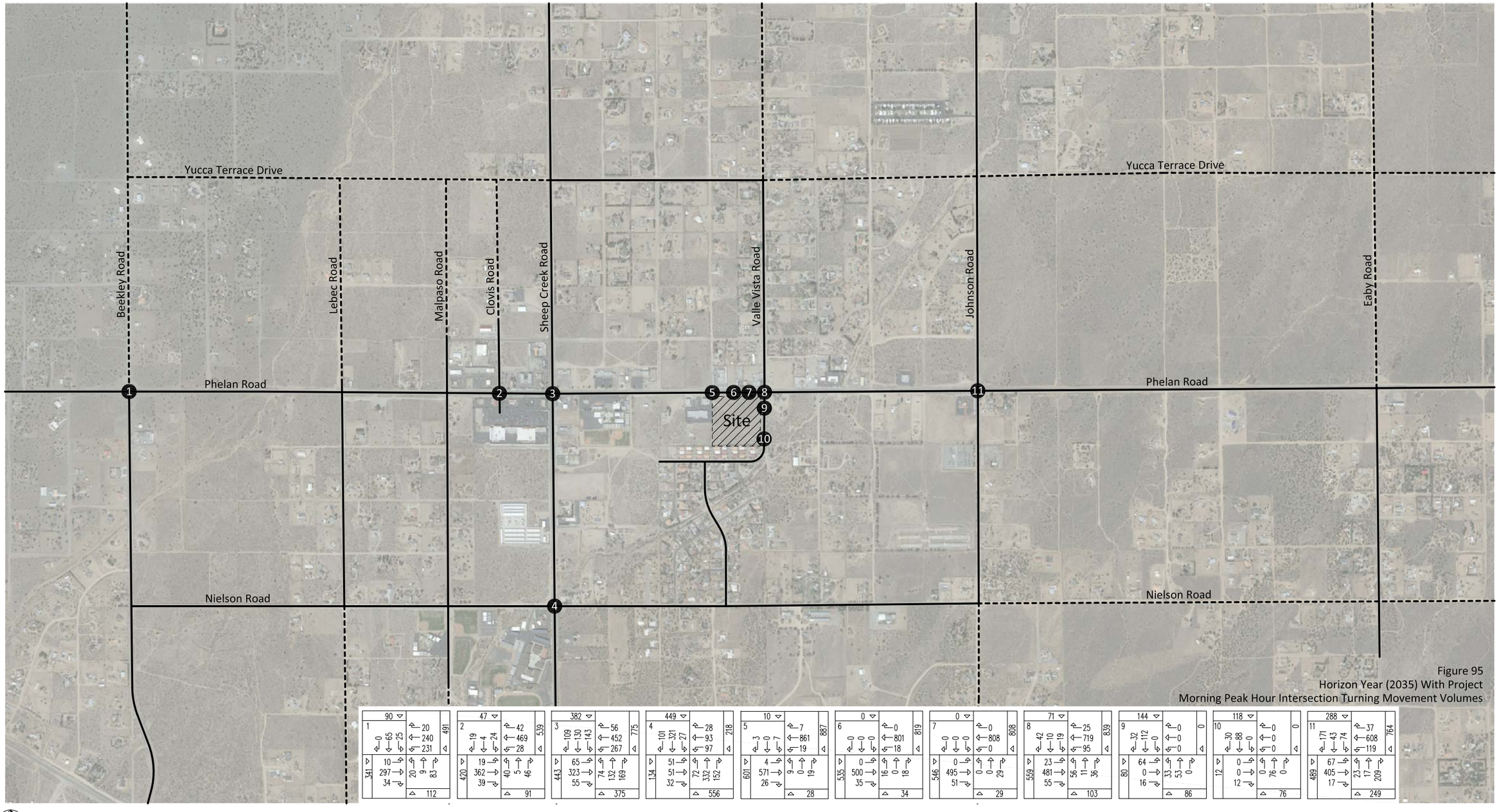


Figure 95
Horizon Year (2035) With Project
Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 96
Horizon Year (2035) With Project
Evening Peak Hour Intersection Turning Movement Volumes

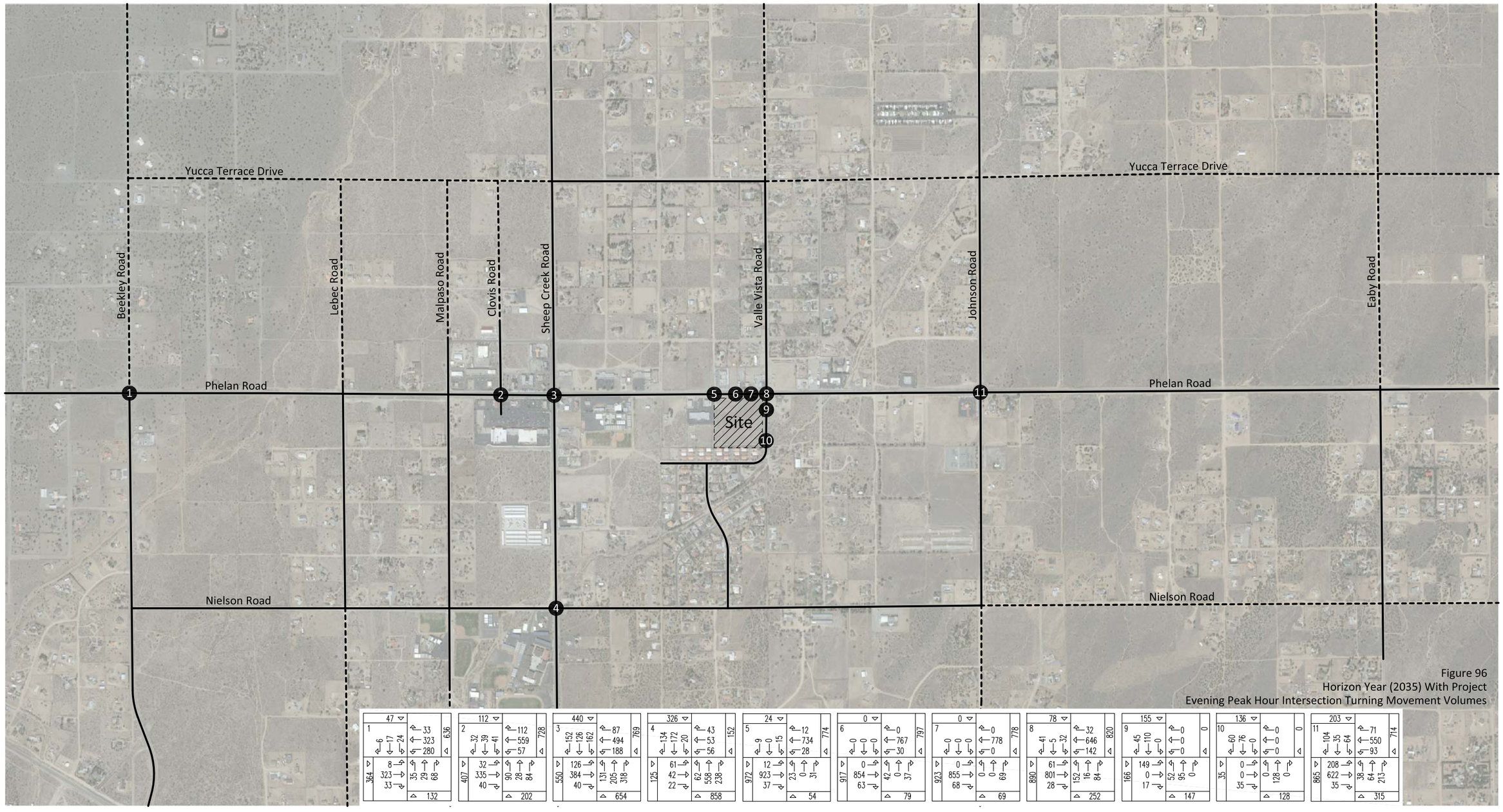


Figure 96
Horizon Year (2035) With Project
Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

V. OTHER TRAFFIC CONSIDERATIONS

A. Site Access Analysis

All project driveway access driveways shall provide adequate driveway length in accordance with the County standards. The maximum outbound volume for any one of the project driveways on Phelan Road is 45 vehicles per hour, and the minimum driveway length should adequately accommodate this volume per County standards.

All project access driveways with right turn inbound volumes of 20 vehicles per hour will be reviewed for a turn deceleration lane. The maximum inbound right turn volume for any one of the project driveways is 34 vehicles. The westbound traffic volume for Phelan Road exceeds 600 for existing traffic conditions, therefore, a right turn deceleration lane is recommended on the north side of the project adjacent to Phelan Road. The southbound traffic volume for Valle Vista Road is below 100, therefore, no right turn deceleration lane is recommended.

All project access driveways appear to provide adequate spacing between driveways and between driveways and the curb return of the main roadway. See San Bernardino County Road Planning and Design Standards Manual, Driveway Spacing Figure 6-1 for further detail.

The two western project driveway accesses on Phelan Road are full access driveways with no turning restrictions. The eastern project driveway on Phelan Road is a right turn in right turn out because of its proximity to the intersection. The north project driveway on Valle Vista Road is a full access driveway with no turning restrictions. The south project driveway on Valle Vista Road is a right turn in right turn out limited access driveway because of sight distance issues with the existing roadway alignment south of the project.

B. Left Turn Storage Lane Evaluation

Typically for signalized intersections, a left turn lane is needed for conditions with more than 100 turning vehicles per hour, and dual left turn lanes are recommended if the left turn volume exceeds 300 vehicles per hour during the peak hour. In general, right turn traffic delays are less critical than left turn delays. However, right turn storage lanes can be justified on the basis of capacity analysis and accident records. Right turn and left turn storage lengths are determined using the same methodology.

The recommended minimum acceptable design length for a turn storage length is 150 feet for arterials with speeds greater than 45 miles per hour. The recommended maximum single turn storage length shall be 300 feet; therefore, dual left hand turn lanes should be used when over 300 feet of storage is required or when necessary to provide acceptable levels of service at the intersection. For local streets and driveways, smaller storage lengths are permitted when volumes permit. For unsignalized intersections, the “rule of thumb” storage length is to be one foot for each vehicle per hour turning left during the peak hour.

Required storage lengths have been calculated based on the guidelines provided in the California Department of Transportation Highway Design Manual, Section 405.2. For

unsignalized intersections, the required storage length is calculated as the number of turning vehicles likely to arrive in an average 2-minute period during the peak hour. For signalized intersections, the required storage length is calculated based on 2 times the average turning vehicles per cycle. This provides a storage length to accommodate all turn arrivals during the peak hour 95 percent of the time. A minimum of 2 passenger cars should be provided at 25 feet per vehicle (50 feet minimum storage length).

Unsignalized
[LTV (vehicles per hour) x (2 minutes) x (hour/60 min)] * 25 feet per vehicle
= Length for 2 minutes

Signalized
[LTV (vehicles per hour) x (Cycle sec) x (hour/ 3600 sec)] * 25 feet per vehicle *2 = Length per cycle

Left turn storage lengths were analyzed at Phelan Road and Valle Vista Road to verify the storage capacity for the proposed project. Left turn storage should be provided at a length to allow for adequate storage of turning vehicles during the peak hours for Horizon Year (2035) With Project traffic conditions. See Table 23 for calculated storage lengths and actual storage lengths.

The eastbound two-way left turn lane should be reconfigured to provide a dedicated eastbound left turn lane with an adequate storage capacity length. The existing westbound left turn storage at the Phelan Road and Valle Vista Road intersection is currently 50 feet in length and appears to currently provide adequate storage for turning vehicles during the peak hours; however this left turn storage length is inadequate for Horizon Year (2035) traffic conditions. A westbound lane should be added to provide a dedicated westbound left turn lane with an adequate storage capacity length. The northbound left turn volume for Horizon Year (2035) traffic conditions is projected to exceed the 100 vehicle threshold for providing a dedicated left turn lane. A northbound left turn lane should be provided with an adequate storage capacity length to provide for turning vehicles during the peak hours.

C. Sight Distance Analysis

Sight distance is the continuous length of roadway visible to the driver. Two types of sight distance are considered for this driveway: (1) Stopping sight distance is the minimum distance required by the driver on the major approach (or roadway) traveling at a given speed to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eye, which is located 42 inches about the pavement to an object that is 6 inches above the pavement; (2) Corner sight distance is the minimum distance required by the driver of a vehicle exiting the driveway to enter the lanes of traffic without requiring the approach traffic traveling at a given speed to radically alter their speed or trajectory. Corner sight distance is measured from the driveway driver's eye, which is located 42 inches about the pavement to an object that is 51 inches above the pavement in the center of the approach lane (such as an on-coming vehicle).

The proposed project driveways on Valle Vista Road will controlled with a stop sign, which stops vehicles when exiting the driveway. The Valle Vista Road is a two lane undivided roadway adjacent to the proposed site with a 90 degree horizontal curve south of the proposed project. The posted speed limit along Valle Vista Road at the curve is 15 miles per hour with a curve warning sign and speed limit plaque to the southbound and westbound directions. Radar speed surveys for northbound and southbound Valle Vista Road were obtained by Kunzman Associates, Inc. in April 2015 to determine the actual vehicle travel speeds. The radar speed survey worksheets are included in Appendix H.

Based upon the radar speed survey, the 85th percentile vehicle speed on Valle Vista Road is 34 miles per hour in the southbound direction and 34 miles per hour in the northbound direction. The 85th percentile speed is defined as the speed at or below 85 percent of the drivers on a particular roadway segment.

Based upon the radar speed survey, the sight distance analysis assumes that the vehicles are traveling at 34 miles per hour along Valle Vista Road adjacent to the proposed development.

In addition to the project driveways on Valle Vista Road, the western shared driveway on Phelan Road was also reviewed for sight distance as the adjacent project to the west of the proposed development will be offset from the added drop lane installed by the proposed project.

Figures 97 to 99 show the summary for the sight distance analysis.

1. Stopping Sight Distance Analysis

   The stopping sight distance minimum required distance is per Table 201.1 in the Highway Design Manual for a driver approaching on the major roadway to see a vehicle exiting from the minor roadway at the prevailing speed.

   The posted speed limit along Valle Vista Road at the horizontal curve is 15 miles per hour. The assumed vehicle speed along Valle Vista Road is 34 miles per hour based on the radar speed survey resulting in a stopping sight distance of 250 feet. The posted speed on Phelan Road is 45 miles per hour, and using 50 miles per hour as the prevailing speed the stopping sight distance is 430 feet.

2. Corner Sight Distance Analysis

   The corner sight distance minimum requirement is per Table 405.1A in the Highway Design Manual for the driver to exit from the minor approach onto the major approach which has a given speed. Corner sight distance accounts the distance needed to detect an approaching vehicle and maneuver from a stopped position into the local roadway for vehicles exiting the project.

   The posted speed limit along Valle Vista Road at the horizontal curve is 15 miles per hour. The assumed vehicle speed along Valle Vista Road is 34 miles per hour based on the radar speed survey resulting in a corner sight distance of 385 feet. The posted

speed on Phelan Road is 45 miles per hour, and using 50 miles per hour as the prevailing speed the corner sight distance is 550 feet.

3. Restricted Use Area

The area between the line of sight and the centerline of the nearest approaching lane is defined as the limited use area. No objects within the limited use areas should exceed the maximum height of eighteen (18) inches to insure a clear line of sight. The limited use area should be kept clear of obstructions, including landscaping over 18 inches to allow better visibility.

Figures 97 and 99 show the summary of the sight distance analysis for Valle Vista Road at the proposed project driveways for vehicles exiting the project site. The stopping sight distance, corner sight distance and the restricted use area for sight distance are shown. As shown on Figure 97, the north project driveway at Valle Vista Road provides adequate stopping and corner sight distance per the sight distance analysis for both north and south directions. As shown on Figure 98, the south project driveway at Valle Vista Road provides adequate stopping and corner sight distance per the sight distance analysis for the north direction, but does not provide adequate sight distance on the south side because of obstructions in the line of sight and the roadway horizontal curve. As shown on Figure 99, the western project driveway on Phelan Road provides adequate stopping and corner sight distance per the sight distance analysis for the west direction, but does not provide adequate sight distance on the east side because of obstructions in the limited use area.

To mitigate the sight distance concern for project access driveways the southern project driveway on Valle Vista Road will be limited access and the western project driveway on Phelan Road will have a no parking restriction on the curb in the limited use area. The south project driveway on Valle Vista Road shall be a right turn in right turn out limited access driveway because of sight distance issues with the existing roadway alignment south of the project. A no-parking zone should be established for the Phelan Road from 20 feet east to 110 feet west of western driveway. No-parking signs or red curbing should be installed to help with the line of sight for vehicles approaching driveways as well as vehicles exiting the driveways.

D. Platoon Flow at Adjacent Intersections

When a two way stop control intersection is located close to a traffic signal, the capacity and/or the delay can be affected by the organized platoon flow of vehicles leaving the adjacent upstream signalized intersection. The platooning effect of the traffic signal will provide for larger gaps in mainline flow which improves adjacent cross-street capacity and lessens delay. The degree of the effect will vary based on the distance to the signal, volume of the mainline flow, signal timing and lane configuration. Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection, the effects of platooning vehicles was also analyzed. The Clovis Road and Phelan Road intersection was projected to operate with less delay when the adjacent traffic signal is included in the analysis.

Table 23

Left Turn Storage Length Analysis[1]

Intersection	Jurisdiction	Traffic Control[2]	Cycle Length	Intersection Left Turn Lanes											
				Northbound			Southbound			Eastbound			Westbound		
				Turning Volume	Calculated Length	Actual Length	Turning Volume	Calculated Length	Actual Length	Turning Volume	Calculated Length	Actual Length	Turning Volume	Calculated Length	Actual Length
Existing Plus Project															
Clovis Road (NS) at:															
Phelan Road (EW) - #2	SB County	TS													
AM			60	42	35.0	0	15	50	60	18	50	105	30	50	100
PM			60	51	42.5	0	15	50	60	18	50	105	30	50	100
Valle Vista Road (NS) at:															
Phelan Road (EW) - #8	SB County	TS													
AM			60	42	35.0	0	15	50	0	18	50	0	30	50	50
PM			60	51	42.5	0	15	50	0	18	50	0	30	50	50
Initial Opening Year (2017) Without Project															
Clovis Road (NS) at:															
Phelan Road (EW) - #2	SB County	TS													
AM			60	42	35.0	0	15	50	60	18	50	105	30	50	100
PM			60	91	75.8	0	27	50	60	30	50	105	57	50	100
Opening Year (2017) With Project															
Clovis Road (NS) at:															
Phelan Road (EW) - #2	SB County	TS													
AM			60	42	35.0	0	16	50	60	18	50	105	30	50	100
PM			65	91	82.2	0	30	50	60	30	50	105	57	51.5	100
Valle Vista Road (NS) at:															
Phelan Road (EW) - #8	SB County	TS													
AM			60	12	10.0	0	13	10.8	0	21	50	0	16	50	50
PM			60	23	19.2	0	20	16.7	0	42	50	0	18	50	50
Opening Year (2024) Without Project															
Clovis Road (NS) at:															
Phelan Road (EW) - #2	SB County	TS													
AM			60	42	35.0	0	15	50	60	18	50	105	30	50	100
PM			60	91	75.8	0	27	50	60	31	50	105	57	50	100
Valle Vista Road (NS) at:															
Phelan Road (EW) - #8	SB County	TS													
AM			60	10	8.3	0	17	14.2	0	19	50	0	25	50	50
PM			60	23	19.2	0	26	21.7	0	45	50	0	25	50	50
Opening Year (2024) With Project															
Clovis Road (NS) at:															
Phelan Road (EW) - #2	SB County	TS													
AM			60	42	35.0	0	23	50	60	18	50	105	30	50	100
PM			60	91	75.8	0	38	50	60	31	50	105	57	50	100
Valle Vista Road (NS) at:															
Phelan Road (EW) - #8	SB County	TS													
AM			60	45	37.5	0	17	14.2	0	19	50	0	78	65	50
PM			60	91	75.8	0	26	21.7	0	45	50	0	103	85.8	50
Horizon Year (2035) Without Project															
Clovis Road (NS) at:															
Phelan Road (EW) - #2	SB County	TS													
AM			60	42	35.0	0	16	50	60	19	50	105	30	50	100
PM			60	91	75.8	0	38	50	60	32	50	105	57	50	100
Valle Vista Road (NS) at:															
Phelan Road (EW) - #8	SB County	TS													
AM			60	12	10.0	0	19	15.8	0	23	50	0	35	50	50
PM			60	51	42.5	0	15	12.5	0	18	50	0	30	50	50
Eaby Road (NS) at:															
Phelan Road (EW) - #13	SB County	TS													
AM			60	31	25.8	0	7	5.8	0	4	50	125	19	50	160
PM			60	31	25.8	0	7	5.8	0	12	50	125	42	50	160
Horizon Year (2035) With Project															
Clovis Road (NS) at:															
Phelan Road (EW) - #2	SB County	TS													
AM			60	42	35.0	0	24	50	60	19	50	105	30	50	100
PM			60	91	75.8	0	41	50	60	32	50	105	57	50	100
Valle Vista Road (NS) at:															
Phelan Road (EW) - #8	SB County	TS													
AM			60	47	39.2	0	19	15.8	0	23	50	0	88	73.3	50
PM			60	109	90.8	0	32	26.7	0	58	50	0	115	95.8	50
Eaby Road (NS) at:															
Phelan Road (EW) - #13	SB County	TS													
AM			60	39	32.5	0	7	5.8	0	4	50	125	28	50	160
PM			60	31	25.8	0	7	5.8	0	12	50	125	42	50	160

[1] Source: California Department of Transportation, Highway Design Manual, Section 405.2.

[2] TS= Traffic Signal.

Figure 97
Sight Distance Analysis Valle Vista Road at South Project Driveway

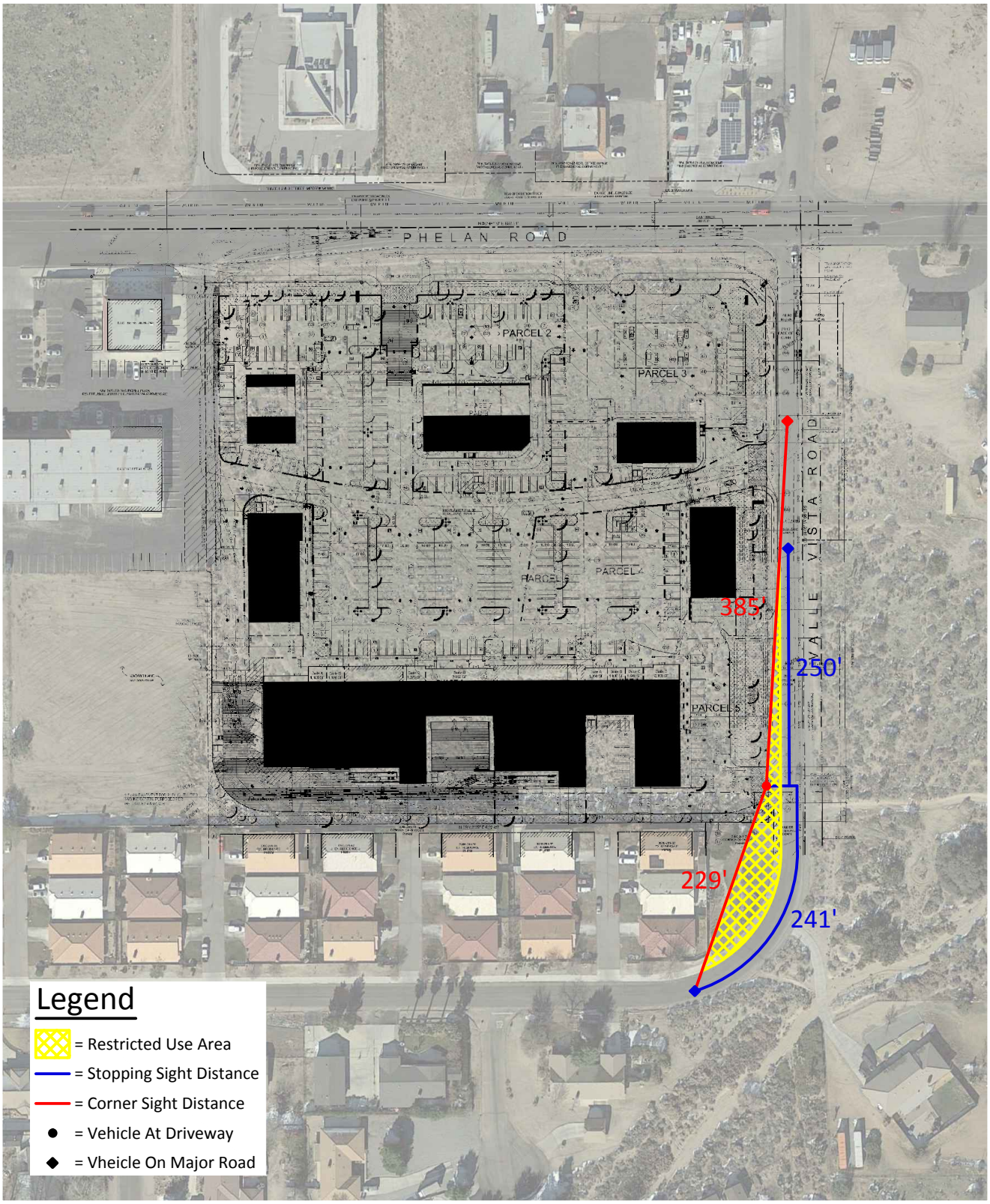


Figure 98
Sight Distance Analysis Valle Vista Road at North Project Driveway

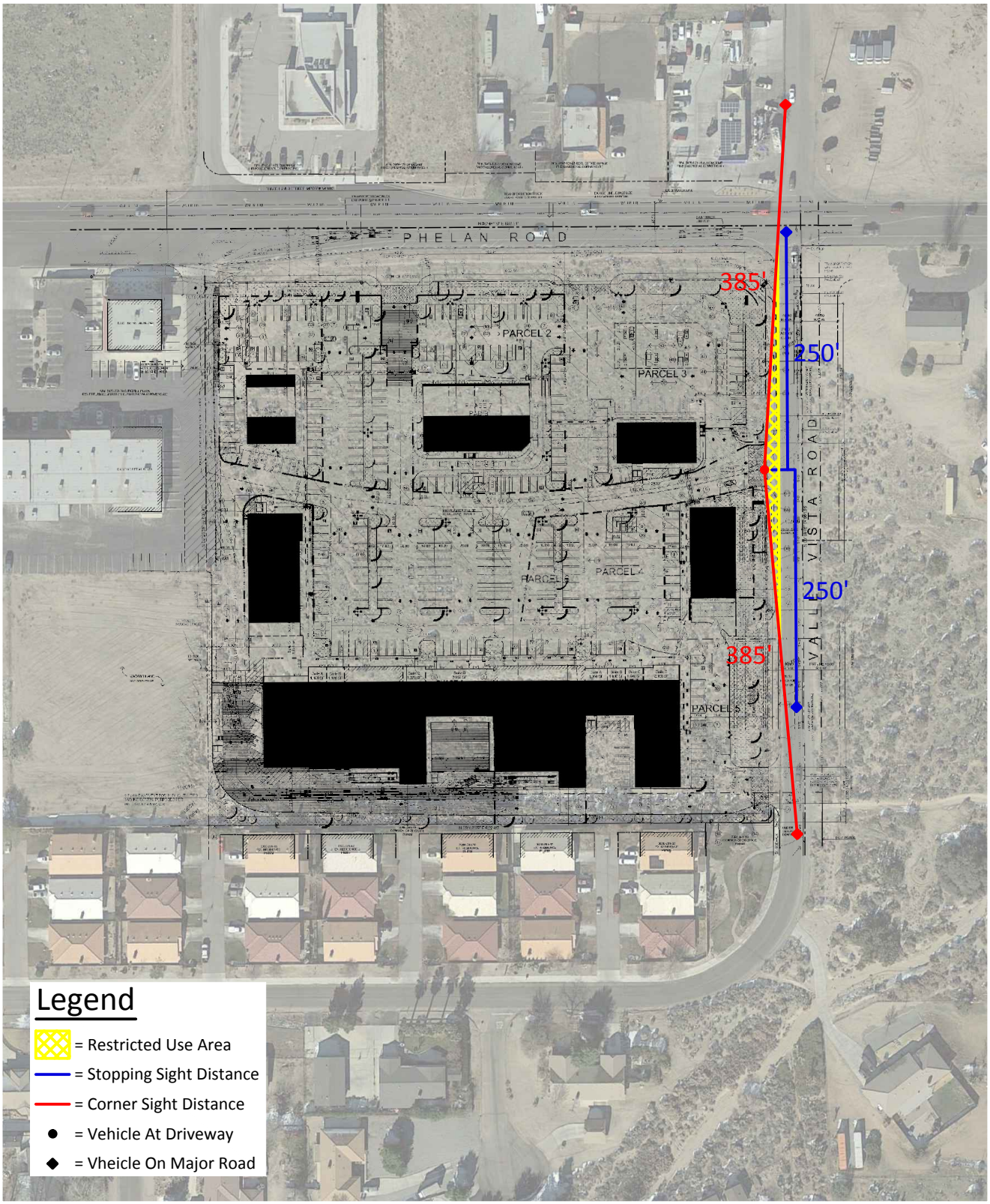
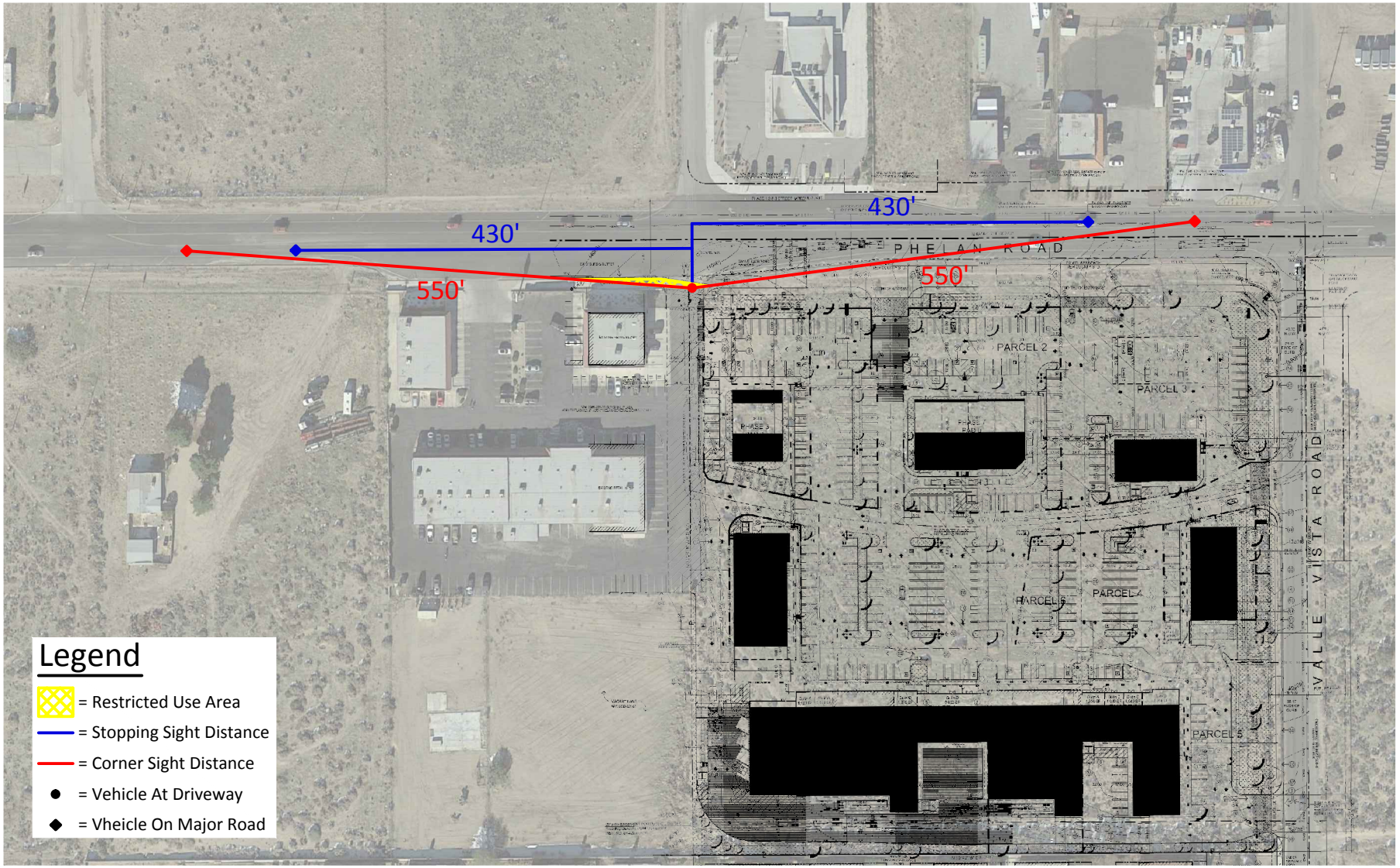


Figure 99
Sight Distance Analysis Phelan Road at West Project Driveway



VI. PROJECT MITIGATION

A. Required Improvements and Costs

Improvements that will eliminate all anticipated roadway operational deficiencies throughout the study area have been identified for Existing Plus Project, Opening Year (2017), Opening Year (2018), Opening Year (2019), Opening Year (2020), Opening Year (2021), Opening Year (2022), Opening Year (2024), and Horizon Year (2035) traffic conditions. The improvements were determined through the operations analysis of Section IV.

The approximate costs for the Horizon Year (2035) improvements have generally been estimated using cost guidelines in the Congestion Management Program Handbook (see Appendix J). A unit cost of $598,500 has been obtained from County of San Bernardino staff for the installation of a traffic signal and has been substituted for the lower value cited in the Congestion Management Program materials. For adding a through lane, a unit cost of $290,000 has been assumed. For adding a turn lane, a unit cost of $50,000 has been assumed.

The needed improvements and resulting costs are summarized in Table 24 for the study area intersections for both the Project Only and Other Development Only (if applicable) Conditions. The exclusive and mutual improvement costs are listed at the bottom of Table 24.

The total cost of needed and unfunded intersection improvements is $1,367,000. As shown in Table 24, the project's identified intersection improvement costs are $768,500 and is specified by year/phase of construction required.

B. Project Contribution and Pro-Rata Costs

The project Pro-Rata contributions have also been calculated for Horizon Year (2035) improvement locations. The project share of cost has been based on the proportion of project peak hour traffic contributed to the improvement location relative to the total new peak hour Horizon Year (2035) traffic volume.

This area of Phelan is currently included in the High Desert Local Area Transportation Facilities Plan. The high desert development funding is used for improvements specified by the plan. High Desert Local Area Transportation Plan includes widening Phelan Road to a 6 lane roadway section. Improvements for lane widening and future traffic signals within the study area are included in the Project Pro-Rata Traffic Contribution and Cost in Table 25.

Table 25 presents a summary of improvement cost and project cost shares at the Horizon Year (2035) intersection improvement locations. The intersection Pro-Rata cost calculations are based on the highest of the morning or evening peak hour traffic volumes. As shown in Table 25, the project's identified pro-rata intersection costs for local improvements are $169,575.

The project shall construct Valle Vista Road/Phelan Road improvements as noted on Table 24; however for the lane widening items they may apply for a fee credit based on the pro-rata costs listed in Table 25. The project shall contribute to the future traffic signal at Clovis Road/Phelan Road intersection and Phelan Road roadway widening at Sierra Vista Road/Phelan Road intersection as noted on Table 24 and 25.

The dollar amounts are rough order of magnitude estimates only. They are intended only for the discussion purposes of this traffic impact analysis, and do not imply any legal responsibility or formula for contributions or mitigation.

As mitigation for the potential traffic impacts, the proposed project shall contribute through an adopted traffic impact fee program in addition to any contributions shown within the traffic study which is not covered within this fee program.

Table 24

Summary of Intersection Improvements and Costs

Intersection	Jurisdiction	Improvement	Cost Estimate[1]
Opening Year (2018) Phase 2			
Valle Vista Road (NS) at:			
Phelan Road (EW) - #8	SB County	Add NB Left Turn Lane [2]	$50,000
		Add SB Left Turn Lane[2]	$50,000
		Add EB Left Turn Lane (striping modification)[2]	$10,000 [3,4]
		Add WB Right Turn Lane[2]	$50,000 [3,4]
		Lengthen WB Left Turn Lane (striping modification)[2]	$10,000 [3,4]
Opening Year (2018) Phase 2 Total			$170,000
Opening Year (2019) Phase 3			
Valle Vista Road (NS) at:			
Phelan Road (EW) - #8	SB County	Install Traffic Signal[2]	$598,500
Horizon Year (2035)			
Clovis Road (NS) at:			
Phelan Road (EW) - #2	SB County	Install Traffic Signal	- [5]
Sierra Vista Road (NS) at:			
Phelan Road (EW) - #5	SB County	Add WB Right-Through Shared Lane (striping modification)	- [6]
Project Improvements - Opening Year (2017)			None
Project Improvements - Opening Year (2018)			$170,000
Project Improvements - Opening Year (2019)			$598,500
Total			$768,500

[1] Cost estimate based on values from the Appendix G Preliminary Construction Cost Estimates For Congestion Management Plan, San Bernardino Association of Governments (2003). Costs estimates are sensitive to the quantity and location of work specified for a given installation. These values represent the relative magnitude of the cost and should be verified through the bidding process.

[2] Project related improvement to mitigate direct impacts and improve level of service.

[3] Improvements covered by the High Desert Local Transportation fee program are collected at a pro-rata basis shown in Table 25.

[4] Project shall construct Valle Vista Road/ Phelan Road improvements, and may apply for High Desert Local fee credits for widening.

[5] Contribute to the pro-rata intersection traffic contributions for the future Traffic Signal installation at Clovis Road and Phelan Road intersection. (see Table 25).

[6] Contribute to the High Desert Local Area Transportation Facilities Plan for Sierra Vista Road and Phelan Road intersection improvements.

Table 25

Project Pro-Rata Intersection Traffic Contribution and Cost[1]

Intersection	Jurisdiction	Cost	Peak Hour	Existing Traffic	Year 2035 With Project Traffic	Project Traffic	Total New Traffic	Project % of New Traffic	Project Cost Share
Clovis Road (NS) at:									
Phelan Road (EW) - #2 [2]	SB County	$598,500	Morning	940	1,097	40	157	25.5%	
			Evening	1,209	1,449	68	240	28.3%	$ 169,575

Project Pro-Rata Intersection Traffic Contribution Per Phase

Project Phase	% Trips	Intersection #2
Opening Year 2017	21.7%	$36,813
Opening Year 2018	8.1%	$13,802
Opening Year 2019	5.9%	$9,932
Opening Year 2020	22.0%	$37,232
Opening Year 2021	10.8%	$18,359
Opening Year 2022	8.4%	$14,184
Opening Year 2023	18.8%	$31,818
Opening Year 2024	4.4%	$7,435
Total	100.0%	$169,575

[1] Improvements to the Valle Vista Road and Phelan Road intersection adjacent to the project are not included in the total as the applicant will be responsible for construction these improvements. The applicant can apply for reduction in High Desert Transportation fees based on the difference between the fair share assessment and the total installation costs allocated to the project..

[2] The project will contribute to the future traffic signal within the study area at a pro-rata basis. A traffic signal is projected to be warranted at Clovis Road/Phelan Road (see Appendix F).

VII. CONCLUSIONS AND RECOMMENDATIONS

A. Summary

The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act.

The County of San Bernardino is the lead agency responsible for preparation of the traffic impact analysis, in accordance with the California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated for the anticipated initial opening date with partial occupancy in Year 2017, final opening date with full occupancy of the development in Year 2024, at which time it will be generating trips at its full potential, and for the Horizon Year (2035).

A series of scoping discussions were conducted with the following agency to define the desired analysis locations for each future analysis year:

- County of San Bernardino

In addition, the San Bernardino Transportation Analysis Model (SBTAM) has been obtained through discussions with the Southern California Association of Governments (SCAG) staff for purposes of this analysis for associated travel patterns.

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (Opening Year or Horizon Year) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does contribute trips greater than the arterial link threshold volume of 50 two-way trips in the morning and evening peak hours in the County of San Bernardino.

The average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Horizon Year (2035) average daily traffic volume forecasts (see Appendix D). This difference defines the growth in traffic over the 27 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2014 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2014 and Year 2035 is 21 years of the 27 year time frame, a factor of 0.78 (i.e., 21/27) was used.

The Horizon Year (2035) without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 peak hour volumes. The growth increment calculation worksheets are shown in Appendix D. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The Opening Year traffic volumes for each phase have been interpolated from the Horizon Year (2035) traffic volumes based upon a portion of the future growth increment.

Project traffic volumes were then added to the San Bernardino Transportation Analysis Model traffic volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

B. Existing Conditions

Regional access to the project site is provided by SR-138 and the I-15 Freeway. Local access is provided by various roadways in the vicinity of the site. The north-south roadway which will be most affected by the project includes Sheep Creek Road, Valle Vista Road and Johnson Road. The east-west roadways which will be most affected by the project includes Yucca Terrace Drive, Phelan Road, and Nielson Road.

For Existing traffic conditions, the study area intersections currently operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that currently operates at Level of Service D[13] or worse during the peak hours:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

A traffic signal appears to be currently warranted at the following study area intersection for Existing traffic conditions (see Appendix G):

[13] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

Clovis Road (NS) at:
Phelan Road (EW) - #2

The unsignalized intersection has been evaluated for a traffic signal using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California Manual of Uniform Traffic Control Devices (November 2014).

C. Project Trips

Trip generation rates were determined for daily trips, morning peak hour inbound and outbound trips, and evening peak hour inbound and outbound trips for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes are determined. Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012.

The proposed development is projected to generate a total of approximately 8,895 daily vehicle trips, 268 which will occur during the morning peak hour and 453 of which will occur during the evening peak hour.

The San Bernardino Transportation Analysis Model has been used to evaluate the regional distribution of project traffic. A select zone (trip distribution) analysis was performed using the San Bernardino Transportation Analysis Model with the assistance of Southern California Association of Governments staff. The socio-economic data inputs to the San Bernardino Transportation Analysis Model are representative of the planned project development intensity.

D. Future Conditions

Study area intersection delay and level of service values are shown based on existing geometrics (without improvement) and with improvements when the intersection level of service falls below the Level of Service threshold set by the County of San Bernardino. The Existing Plus Project traffic operations analysis is summarized in Table 4. Morning and evening peak hour traffic operations analysis are summarized in Tables 5 to 22 for Opening Year (2017), Opening Year (2018), Opening Year (2019), Opening Year (2020), Opening Year (2021), Opening Year (2022), Opening Year (2034), Opening Year (2024), and the Horizon Year (2035) traffic conditions), and the Horizon Year (2035) traffic conditions.

Intersection delay calculation worksheets for the various traffic conditions are provided in Appendix F.

1. Existing Plus Project

For Existing Plus Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the

following study area intersection is projected to operate at Level of Service D[14] or worse during the peak hours:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Existing Plus Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

2. Opening Year (2017) Without Project

For Opening Year (2017) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service D[14] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2017) without project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to continue to operate at Level of Service D during the evening peak hour, without improvements.

3. Opening Year (2017) With Project

For Opening Year (2017) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service D[14] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2017) with project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to continue to operate at Level of Service D during the evening peak hour, without improvements. Project generated trips did not result in a significant impact at these intersections as it is projected to not deteriorate the previously existing without project Levels of Service.

[14] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

4. Opening Year (2018) Without Project

For Opening Year (2018) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service D[15] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2018) without project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to operate within acceptable Levels of Service during the peak hours, with improvements. Phased project improvements would maintain the existing Level of Service D.

5. Opening Year (2018) With Project

For Opening Year (2018) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[15] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2018) without project traffic conditions, the Valle Vista Road/Phelan Road intersection is projected to operate within acceptable Levels of Service during the peak hours, with improvements. Phased project improvements would maintain the existing Level of Service D.

6. Opening Year (2019) Without Project

For Opening Year (2019) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[15] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2019) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

[15] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

7. Opening Year (2019) With Project

For Opening Year (2019) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[16] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2019) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

A traffic signal is projected to be warranted at the following additional study area intersection for Opening Year (2019) with project traffic conditions (see Appendix G):

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

The unsignalized intersection has been evaluated for a traffic signal using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California Manual of Uniform Traffic Control Devices (November 2014).

8. Opening Year (2020) Without Project

For Opening Year (2020) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[16] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2020) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

9. Opening Year (2020) With Project

For Opening Year (2020) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except

[16] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

for the following study area intersections that are projected to operate at Level of Service E[16] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2020) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

10. Opening Year (2021) Without Project

For Opening Year (2021) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[17] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2021) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

11. Opening Year (2021) With Project

For Opening Year (2021) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[17] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2021) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

12. Opening Year (2022) Without Project

For Opening Year (2022) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[17] during the peak hours, without improvements:

[17] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2022) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

13. Opening Year (2022) With Project

For Opening Year (2022) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[18] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2022) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

14. Opening Year (2023) Without Project

For Opening Year (2023) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[18] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2023) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

15. Opening Year (2023) With Project

For Opening Year (2023) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[18] or worse during the peak hours, without improvements:

[18] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2023) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

16. Opening Year (2024) Without Project

For Opening Year (2024) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersection that is projected to operate at Level of Service E[19] during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2024) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

17. Opening Year (2024) With Project

For Opening Year (2024) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E[19] or worse during the peak hours, without improvements:

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Opening Year (2024) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

18. Horizon Year (2035) Without Project

For Horizon Year (2035) without project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service D or worse during the peak hours, without improvements:

[19] Because of the proximity of the Clovis Road and Phelan Road intersection to the adjacent signalized intersection the effects of platooning vehicles was also analyzed, and this intersection was found to operate at an acceptable level of service.

Clovis Road (NS) at:
Phelan Road (EW) - #2[19]

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Horizon Year (2035) without project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

19. Horizon Year (2035) With Project

For Horizon Year (2035) with project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours, except for the following study area intersections that are projected to operate at Level of Service D or worse during the peak hours, without improvements:

Clovis Road (NS) at:
Phelan Road (EW) - #2[19]

Sierra Vista Road (NS) at:
Phelan Road (EW) - #5

Valle Vista Road (NS) at:
Phelan Road (EW) - #8

For Horizon Year (2035) with project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

E. Cost Summary

Improvements that will eliminate all anticipated roadway operational deficiencies throughout the study area have been identified for Existing Plus Project, Opening Year (for each phase) and Horizon Year (2035) traffic conditions. The improvements were determined through the operations analysis of Section IV and other traffic considerations of Section V. Tables 26 to 28 summarize the operational analysis for all phases.

The project's identified intersection costs is $768,500 (see Table 24). The project will provide phased improvement for area intersections which are impacted. The phasing of the improvement and the percent of the cost relative to project related traffic is shown on Tables 24 and 25.

[19] Per the Highway Capacity Manual, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown for intersections with stop control. The minor private commercial driveway has Level of Service D. However, the major public roadway (Phelan Road) and the minor public roadway (Clovis Road) have Levels of Service A and C respectively.

This area of Phelan is currently included in the High Desert Local Area Transportation Facilities Plan. Improvements for lane widening and future traffic signals within the study area are included in the Project Pro-Rata Traffic Contribution and Cost (see Table 25). The project's identified pro-rata intersection costs for local improvements are $169,575.

F. Recommendations

The recommendations in this section address on-site improvements, off-site improvements and the phasing of all necessary study area transportation improvements.

1. On-Site Improvements

a) General to all Phases:

1. On-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 100).

2. Sight distance at project accesses should be reviewed with respect to California Department of Transportation/County of San Bernardino standards in conjunction with the preparation of final grading, landscaping, and street improvement plans. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the County and approved as consistent with this measure prior to issue of grading permits.

3. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

4. Construct and maintain primary and secondary access roadways in conjunction with development prior to the opening of the phase which it services.

5. The site should provide sufficient parking spaces to meet County of San Bernardino parking code requirements in order to service on-site parking demand.

6. A no-parking zone should be established for the Phelan Road from 20 feet east to 110 feet west of western driveway. No-parking signs or red curbing should be installed to help with the line of sight for vehicles approaching driveways as well as vehicles exiting the driveways.

b) Opening Year (2017) With Project Phase 1:

Construct Phelan Road from the west project boundary to Valle Vista Road at its ultimate half-section width including sidewalk, landscaping and parkway improvements in conjunction with development.

Construct Valle Vista Road from Phelan Road to the East-north project driveway (#9) (minimum) at its ultimate half-section width including sidewalk, landscaping and parkway improvements in conjunction with development.

c) Opening Year (2022) With Project Phase 6:

Construct Valle Vista Road from East-north project driveway (#9) to the south project boundary at its ultimate half-section width including sidewalk, landscaping and parkway improvements in conjunction with development.

2. Off-Site Improvements

a) General to all Phases:

1. The necessary off-site improvement recommendations were described in previous sections of this report. The project should contribute towards the cost of necessary study area improvements on a fair share or "pro-rata" basis.

2. As is the case for any roadway design, the County of San Bernardino should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

3. Participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system.

b) Opening Year (2018) With Project Phase 2:

Construct additional lanes at Valle Vista Road and Phelan Road (See Table 24):
Northbound Left Turn Lane on Valle Vista Road
Southbound Left Turn Lane on Valle Vista Road
Westbound Right Turn Lane east of Valle Vista Road

Modify existing lanes at Valle Vista Road and Phelan Road (See Table 24):
Westbound Left Turn Lane east of Valle Vista Road
Eastbound Left Turn Lane west of Valle Vista Road

c) Opening Year (2019) With Project Phase 3:

Install Traffic Signal improvement at Valle Vista Road and Phelan Road. The traffic signals should include an interconnect of the traffic signals to function in a coordinated system (See Table 24).

d) Horizon Year (2035) Without Project:

Contribute to the pro-rata intersection traffic contributions for the future traffic signal installation at the Clovis Road and Phelan Road intersection. The traffic signals should include an interconnect of the traffic signals to function in a coordinated system (See Table 25).

e) Horizon Year (2035) With Project:

Contribute to the High Desert Local Area Transportation Facilities Plan for Sierra Vista Road and Phelan Road intersection improvements. Modify existing lanes westbound right turn lane east of intersection convert to shared through-right lane at Sierra Vista Road and Phelan Road (See Table 24).

Table 26

Summary of Levels of Service for Intersections - Existing to Opening Year (2019) Phase 3

Intersection	Traffic Control[2]	Existing				Opening Year (2017)				Opening Year (2018)				Opening Year (2019)			
		Without Project		With Project		Without Project		With Project		Without Project		With Project		Without Project		With Project	
		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Beekley Road (NS) at:																	
Phelan Road (EW) - #1	TS	11.6-B	10.1-B	12.0-B	10.1-B	11.9-B	10.6-B	11.9-B	10.7-B	11.7-B	10.5-B	11.7-B	10.7-B	11.9-B	10.6-B	12.0-B	10.8-B
Clovis Road (NS) at:																	
Phelan Road (EW) - #2	CSS	16.5-C	29.2-D	17.1-C	33.3-D	17.1-C	34.2-D	17.2-C	35.4-E	17.7-C	38.2-E	17.9-C	40.3-E	17.7-C	39.1-E	18.0-C	41.9-E
With Platooning Analysis[3]	CSS	13.7-B	19.8-C	14.1-B	21.6-C	14.1-B	22.1-C	14.2-B	22.6-C	-	-	-	-	-	-	-	-
Sheep Creek Road (NS) at:																	
Phelan Road (EW) - #3	TS	28.0-C	27.6-C	29.8-C	30.4-C	28.9-C	28.7-C	29.5-C	29.3-C	29.1-C	28.9-C	29.6-C	29.8-C	29.4-C	29.0-C	29.9-C	30.1-C
Nielson Road (EW) - #4	TS	8.8-A	7.9-A	9.3-A	8.1-A	8.8-A	8.0-A	8.8-A	8.0-A	8.8-A	8.0-A	8.8-A	8.0-A	8.7-A	8.0-A	8.7-A	8.1-A
NW Driveway (NS) at:																	
Phelan Road (EW) - #5	CSS	19.5-C	17.8-C	22.1-C	21.3-C	18.8-C	19.0-C	19.2-C	20.8-C	19.1-C	19.5-C	19.7-C	22.2-C	19.4-C	19.6-C	20.5-C	23.2-C
N Driveway (NS) at:																	
Phelan Road (EW) - #6	**CSS**	-	-	14.4-B	20.9-C	-	-	13.8-B	17.6-C	-	-	14.2-B	19.2-C	-	-	14.6-B	19.7-C
NE Driveway (NS) at:																	
Phelan Road (EW) - #7	**CSS**	-	-	11.8-B	15.0-C	-	-	-	-	-	-	-	-	-	-	-	-
Valle Vista Road (NS) at:																	
Phelan Road (EW) - #8																	
Without Improvements	CSS	18.6-C	25.6-D	57.6-F	99.9-F	21.4-C	32.8-D	21.8-C	34.8-D	22.2-C	36.2-E	23.2-C	40.8-E	22.7-C	37.5-E	24.8-C	50.0-E
With Improvements	**CSS/TS**			14.8-B	22.8-C	15.9-C	19.4-C	16.1-C	23.3-C	20.4-C	34.1-D	21.0-C	34.2-D	13.5-B	14.1-B	13.8-B	15.1-B
EN Driveway (EW) - #9	**CSS**	-	-	10.1-B	11.6-B	-	-	8.7-A	9.0-A	-	-	8.8-A	9.2-A	-	-	8.9-A	9.4-A
ES Driveway (EW) - #10	**CSS**	-	-	8.6-A	8.8-A	-	-	-	-	-	-	-	-	-	-	-	-
Johnson Road (NS) at:																	
Phelan Road (EW) - #11	TS	25.6-C	24.3-C	25.9-C	25.7-C	25.6-C	25.3-C	25.6-C	25.5-C	25.6-C	25.4-C	25.6-C	25.7-C	25.8-C	25.5-C	25.8-C	25.8-C

[1] LOS = Level of Service.

[2] TS = Traffic Signal; CSS = Cross Street Stop.

[3] When a two way stop control intersection is located close to a traffic signal, the capacity and/or the delay can be affected by the organized platoon flow of vehicles leaving the adjacent upstream signalized intersection. The platooning effect of the traffic signal will provide for larger gaps in mainline flow which improves adjacent cross-street capacity and lessens delay.

Table 27

Summary of Levels of Service for Intersections - Opening Year (2020) Phase 4 to Opening Year (2022) Phase 6

Intersection	Traffic Control[2]	Opening Year (2020)				Opening Year (2021)				Opening Year (2022)			
		Without Project		With Project		Without Project		With Project		Without Project		With Project	
		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Beekley Road (NS) at:													
Phelan Road (EW) - #1	TS	11.9-B	10.8-B	12.0-B	11.0-B	12.0-B	10.8-B	12.2-B	11.1-B	12.1-B	10.8-B	12.3-B	11.1-B
Clovis Road (NS) at:													
Phelan Road (EW) - #2	CSS	17.7-C	39.1-E	18.1-C	43.1-E	17.7-C	40.6-E	18.1-C	45.6-E	17.8-C	40.6-E	18.3-C	46.3-E
Sheep Creek Road (NS) at:													
Phelan Road (EW) - #3	TS	29.4-C	29.1-C	30.8-C	30.7-C	29.8-C	29.2-C	31.2-C	31.1-C	30.0-C	29.4-C	31.1-C	31.7-C
Nielson Road (EW) - #4	TS	8.8-A	8.1-A	9.3-A	8.1-A	8.9-A	8.1-A	9.5-A	8.2-A	8.9-A	8.1-A	9.4-A	8.2-A
NW Driveway (NS) at:													
Phelan Road (EW) - #5	CSS	19.6-C	19.7-C	20.7-C	22.0-C	19.6-C	19.7-C	21.0-C	22.5-C	19.8-C	20.0-C	21.3-C	23.6-C
N Driveway (NS) at:													
Phelan Road (EW) - #6	**CSS**	-	-	15.1-C	19.8-C	-	-	15.2-C	20.4-C	-	-	13.1-B	20.8-C
NE Driveway (NS) at:													
Phelan Road (EW) - #7	**CSS**	-	-	11.8-B	14.8-B	-	-	11.8-B	15.0-C	-	-	11.9-B	15.5-C
Valle Vista Road (NS) at:													
Phelan Road (EW) - #8													
Without Improvements	CSS	24.3-C	40.5-E	39.6-E	99.9-F	24.4-C	38.4-E	48.9-E	99.9-F [5]	24.9-C	43.1-E	65.1-F	99.9-F [5]
With Improvements	**TS**	13.6-B	14.2-B	14.9-B	17.0-B	13.8-B	15.7-B	15.1-B	17.4-B	13.9-B	15.7-B	15.3-B	22.1-C
EN Driveway (EW) - #9	**CSS**	-	-	9.7-A	10.6-B	-	-	9.9-A	11.0-B	-	-	10.0-B	11.5-B
ES Driveway (EW) - #10	**CSS**	-	-	-	-	-	-	-	-	-	-	8.7-A	8.9-A
Johnson Road (NS) at:													
Phelan Road (EW) - #11	TS	25.8-C	25.5-C	27.5-C	25.9-C	25.8-C	25.6-C	26.0-C	26.2-C	25.9-C	25.6-C	26.0-C	26.3-C

[1] LOS = Level of Service.

[2] TS = Traffic Signal; CSS = Cross Street Stop.

Table 28

Summary of Levels of Service for Intersections - Opening Year (2023) Phase 7 to Horizon Year (2035)

Intersection	Traffic Control[2]	Opening Year (2023)				Opening Year (2024)				Horizon Year (2035)			
		Without Project		With Project		Without Project		With Project		Without Project		With Project	
		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]		Peak Hour Delay-LOS[1]	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Beekley Road (NS) at:													
Phelan Road (EW) - #1	TS	12.1-B	11.1-B	12.3-B	11.5-B	12.1-B	11.1-B	12.4-B	11.5-B	12.8-B	11.9-B	13.4-B	13.0-B
Clovis Road (NS) at:													
Phelan Road (EW) - #2	CSS	17.9-C	40.6-E	18.6-C	47.6-E	17.9-C	41.0-E	18.7-C	48.5-E	19.0-C	47.4-E	19.9-C	57.1-F
With Platooning Analysis[3]	CSS	-	-	-	-	14.3-B	23.9-C	15.6-B	25.0-C	12.9-B	27.3-D [4]	13.3-B	30.9-D [4]
Sheep Creek Road (NS) at:													
Phelan Road (EW) - #3	TS	30.2-C	29.7-C	32.0-C	32.9-C	30.3-C	29.7-C	32.2-C	32.3-C	33.2-C	32.1-C	34.2-C	33.8-C
Nielson Road (EW) - #4	TS	8.9-A	8.1-A	9.4-A	8.2-A	8.9-A	8.2-A	9.5-A	8.3-A	8.9-A	8.4-A	9.3-A	8.5-A
NW Driveway (NS) at:													
Phelan Road (EW) - #5													
Without Improvements	CSS	20.0-C	20.0-C	22.2-C	24.4-C	20.2-C	20.2-C	22.6-C	25.0-C	23.1-C	22.2-C	26.0-D	27.5-D
With Improvements	**CSS**	-	-	-	-	-	-	-	-	20.6-C	19.9-B	22.5-C	21.8-C
N Driveway (NS) at:													
Phelan Road (EW) - #6	**CSS**	-	-	15.3-C	24.1-C	-	-	15.4-C	24.7-C	-	-	16.4-C	24.8-C
NE Driveway (NS) at:													
Phelan Road (EW) - #7	**CSS**	-	-	12.0-B	16.9-C	-	-	12.0-B	17.0-C	-	-	12.2-B	18.6-C
Valle Vista Road (NS) at:													
Phelan Road (EW) - #8													
Without Improvements	CSS	25.4-D	44.9-E	99.9-F	99.9-F	27.7-D	43.8-E	99.1-F	99.9-F	40.7-E	99.9-F	99.9-F	99.9-F [5]
With Improvements	**TS**	13.9-B	15.8-B	15.8-B	19.3-B	14.0-B	15.8-B	15.9-B	19.6-B	14.3-B	19.6-C	15.9-B	19.7-B
EN Driveway (EW) - #9	**CSS**	-	-	10.4-B	12.0-B	-	-	10.6-B	12.2-B	-	-	10.9-B	13.5-B
ES Driveway (EW) - #10	**CSS**	-	-	8.7-A	8.9-A	-	-	8.8-A	8.9-A	-	-	8.9-A	9.0-A
Johnson Road (NS) at:													
Phelan Road (EW) - #11	TS	25.9-C	25.7-C	26.1-C	26.8-C	26.9-C	25.8-C	28.3-C	26.9-C	27.9-C	26.9-C	28.1-C	28.0-C

[1] LOS = Level of Service.

[2] TS = Traffic Signal; CSS = Cross Street Stop.

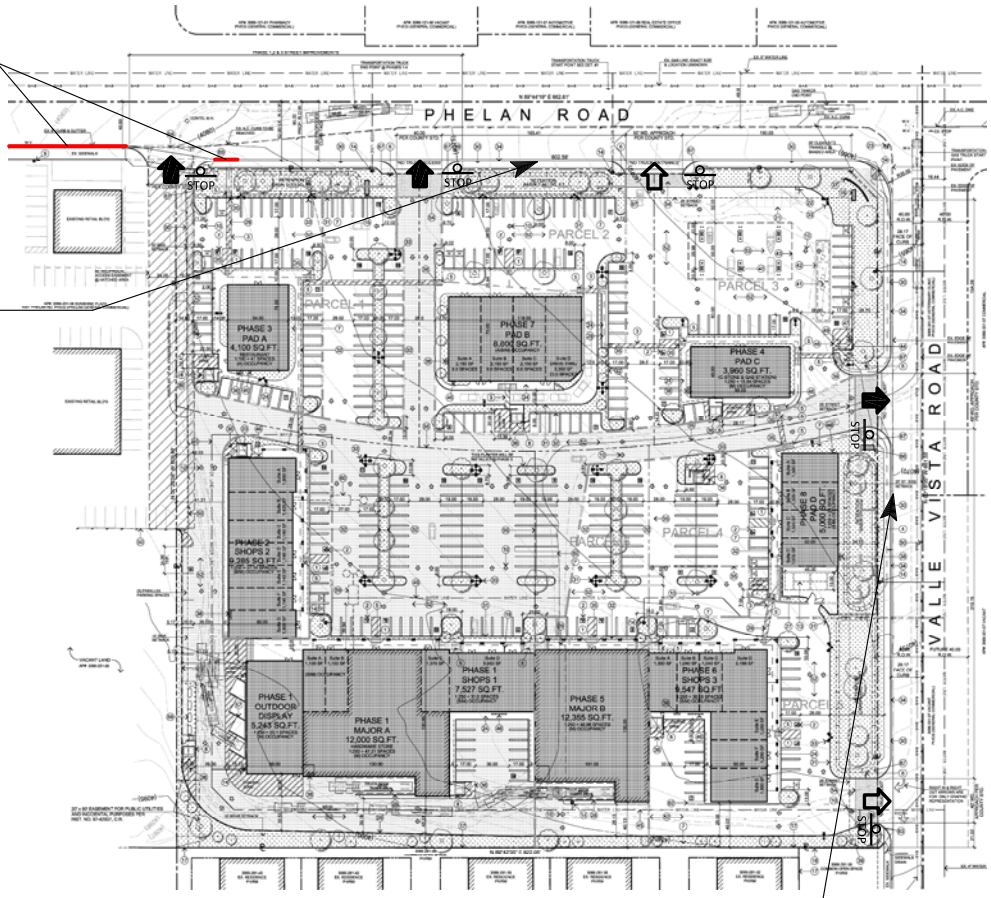
[3] When a two way stop control intersection is located close to a traffic signal, the capacity and/or the delay can be affected by the organized platoon flow of vehicles leaving the adjacent upstream signalized intersection. The platooning effect of the traffic signal will provide for larger gaps in mainline flow which improves adjacent cross-street capacity and lessens delay.

[4] Per the Highway Capacity Manual, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown for intersections with stop control. The minor private commercial driveway has Level of Service D. However, the major public roadway (Phelan Road) and the minor public roadway (Clovis Road) have Levels of Service A and C respectively.

Figure 100
Circulation Recommendations

A no-parking zone should be established for the Phelan Road from 20 feet east to 110 feet west of western driveway. No-parking signs or red curbing should be installed to help with the line of sight for vehicles approaching driveways as well as vehicles exiting the driveways.

Construct Phelan Road from the west project boundary to Valle Vista Road at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.



The site should provide sufficient parking spaces to meet County of San Bernardino parking code requirements in order to service on-site parking demand.

Sight distance at each project access should be reviewed with respect to California Department of Transportation/County of San Bernardino standards in conjunction with the preparation of final grading, landscaping, and street improvement plans. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the County and approved as consistent with this measure prior to issue of grading permits.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

The project should contribute towards the cost of necessary study area improvements on a fair share or "pro-rata" basis.

As is the case for any roadway design, the County of San Bernardino should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system.

Construct Valle Vista Road from Phelan Road to the south project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.

Legend

STOP = Stop Sign
= Full Access Driveway
= Restricted Access Right Turns In/Out Only Access Driveway
= No Parking Zone

APPENDICES

Appendix A – Glossary of Transportation Terms

Appendix B – Scoping Agreement

Appendix C – Traffic Count Worksheets

Appendix D – Future Growth Increment Calculation Worksheets

Appendix E – Traffic Model Plots

Appendix F – Explanation and Calculation of Intersection Delay

Appendix G – Traffic Signal Warrant Worksheets

Appendix H – Radar Speed Survey

Appendix I – Highway Design Manual Sight Distance Standards

Appendix J – Preliminary Construction Cost Estimates for Congestion Management Program

APPENDIX A

Glossary of Transportation Terms

GLOSSARY OF TRANSPORTATION TERMS

COMMON ABBREVIATIONS

AC:	Acres
ADT:	Average Daily Traffic
Caltrans:	California Department of Transportation
DU:	Dwelling Unit
ICU:	Intersection Capacity Utilization
LOS:	Level of Service
TSF:	Thousand Square Feet
V/C:	Volume/Capacity
VMT:	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CYCLE LENGTH: The time period in seconds required for one complete signal cycle.

CUL-DE-SAC STREET: A local street open at one end only, and with special provisions for turning around.

DAILY CAPACITY: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

ORIGIN-DESTINATION SURVEY: A survey to determine the point of origin and the point of destination for a given vehicle trip.

PASSENGER CAR EQUIVALENTS (PCE): One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

Scoping Agreement

SCOPE FOR TRAFFIC STUDY

Project Name:	VVR, LLC Project Number: P201400342 (APN:3066-251-07)

This Scope for Traffic Study acknowledges San Bernardino County Department of Public Works, Traffic Division requirements of traffic impact analysis for the project and is subject to change:

Project Address:	SWC of Valle Vista Road and Phelan Road		
Project Description:	76, 473 square feet of Commercial Retail		
City:	County of San Bernardino / Unincorporated Phelan		
Project Buildout Year:	2024	**Ambient Growth Rate per Year:**	SBTAM
Closest Intersection (Xtn) to the Project			
Xtn N/S Street Name:	Valle Vista Road		
Xtn E/W Street Name:	Phelan Road		
Thomas Guide Pg+Grid:	4473B6	**County Supervisorial District:**	1

	Engineer	**Developer**
Company:	KUNZMAN ASSOCIATES, INC.	STEENO DESIGN STUDIO, INC.
Name:	Ms. Perrie Ilercil, P.E.	Ms. Sophie Steeno
Address:	1111 Town and Country Road, Suite 34	11774 Hesperia Road, Suite B1
City, State, Zip Code:	Orange, CA 92868	Hesperia, CA 92345
Phone #:	714-973-8383	760.244.5001
Fax #:	714-973-8821	
Email:	Perrie@traffic-engineer.com	gosoph@verizon.net

By: 

Print Name: Perrie Ilercil **11.22.2014**

Consultant/Developer's Representative **Date**

Reviewed By:

Print Name:

Traffic Division Representative **Date**

SCOPE FOR TRAFFIC STUDY

Project Name:	VVR, LLC Project Number: P201400342 (APN:3066-251-07)

1. **Traffic Distribution**: Please insert or attach Figure(s) illustrating project trip distribution in percentages and volumes at the study intersections analyzed.
   See Figures:
   - Figure 1 Project Location Map,
   - Figure 2 Site Plan
   - Figure 3 Project Trip Distribution

2. Trip Credit: Exact amount of credit subject to approval by Traffic Division.

Transportation Demand Management (TDM)	Yes/**no**	NO
Existing Active Land Use	Yes/**no**	Vacant
Previous Land Use	Yes/**no**	Vacant
Internal Trip Reduction	Yes/**no**	NO
Pass-by Trip Reduction	**Yes**/no	See Project Trip Generation Table 1

3. Related Projects: Consultant should check with Planning in the San Bernardino County Department of Land Use Services and planning departments of adjoining Cities. Documentation of the consultation from these agencies shall be included in the traffic study. Related projects list shall be submitted to Traffic Division for our review and approval before being incorporated in the study.

4. Freeway Analysis: The potential traffic impact on the following Freeway(s) must be considered.

No

The applicant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) and can be obtained from http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tiguide.pdf. If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using HCM procedures. Appendix A of the SANBAG CMP outlines allowable modifications to these procedures. The SANBAG CMP can be viewed online at:
http://www.sanbag.ca.gov/planning/subr_congestion.html

SCOPE FOR TRAFFIC STUDY

Project Name:	VVR, LLC Project Number: P201400342 (APN:3066-251-07)

5. Trip Generation

Trip Generation Rate(s) Source: ITE Trip Generation	**I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other:**	**Edition:**	9th 2012

Land Use Code	**Land Use**	**Rate Based on**	**Qty**	***AVTE vs**	**ADT**	Weekday a.m. peak		Weekday p.m. peak		Weekend peak hour	
						In	Out	In	Out	In	Out
820	Shopping Center	ITE	66.013		5,184	75	46	218	236	347	320
820	Pass-by: Shopping Center	**ITE**	0/34/26 %		-1,763	0	0	-74	-80	-90	-83
932	High Turn Over (Sit-Down) Restaurant	ITE	4.100		521	24	20	24	16	42	34
934	Fast Food with Drive-thru	ITE	2.400		1,191	56	53	41	38	84	91
934	Pass-by: Fast Food with Drive-thru	ITE	49/50/0 %		-584	-27	-26	-21	-19	0	0
945 853	Service Station with Conv Mkt/ Conv Mkt with Gasoline Pumps	ITE	12		1,953	61	61	81	81	61	59
945	Pass-by: Service Station with Conv Mkt/	ITE	62/56/0 %		-1,211	-38	-38	-45	-45	0	0

* - Average Vehicle Trip Ends.
For ITE Land Uses provide number and name of Land Use. e.g. LU 814 - Variety Store

SCOPE FOR TRAFFIC STUDY

Project Name:	VVR, LLC Project Number: P201400342 (APN:3066-251-07)

6. Study Intersections: At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

Xtn #	% County	Thomas Guide Page+Grid	N/S/E/W Street Name	City	Signalized	CMP
1	100	4472H6	Beekley Road (NS) at Phelan Road (EW)	Unincorp. Phelan	**YES**	**no**
2	100	4473A6	Clovis Road (NS) at Phelan Road (EW)	Unincorp. Phelan	**no**	**no**
3	100	4473A6	Sheep Creek Road (NS) at Phelan Road (EW)	Unincorp. Phelan	**YES**	**no**
4	100	4473A7	Sheep Creek Road (NS) at Nielson Road (EW)	Unincorp. Phelan	**YES**	**no**
8	100	4473B6	Valle Vista Road (NS) at Phelan Road (EW)	Unincorp. Phelan	**no**	**no**
12	100	4473C6	Johnson Road (NS) at Phelan Road (EW)	Unincorp. Phelan	**YES**	**no**
13	100	4473E6	Eaby Road (NS) at Phelan Road (EW)	Unincorp. Phelan	**no**	**no**
5 - 7	100	4473B6	Project Access (NS) at Phelan Road (EW)	Unincorp. Phelan	**no**	**no**
9 - 11	100	4473B6	Valle Vista Road (NS) at Project Access (EW)	Unincorp. Phelan	**no**	**no**
.					Yes/no	Yes/no

Cites to be consulted: _____

SCOPE FOR TRAFFIC STUDY

Project Name:	VVR, LLC Project Number: P201400342 (APN:3066-251-07)

7. Other:

Traffic counts may be conducted immediately per the following:
• Must be taken on Tuesdays, Wednesdays or Thursdays.
• Must exclude holidays, and the first weekdays before and after the holiday.
• Must be taken on days when local schools or colleges are in session.
• Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents).
• Traffic counts used for other traffic studies in the area shall **NOT** be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%.
• New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified.
• For all proposed mitigation measures, a conceptual plan for the improvements shall be submitted to our Traffic Studies section for review and approval prior to the approval of the Traffic Impact Analysis. All proposed improvements shall be within the right-of-way.
• For all cumulative mitigation measures, a cost estimate for the improvement shall be submitted.

This analysis must follow the most current Traffic Impact Study Guidelines for the County as stated in the County's Road Planning and Design Standards.

8. Fees

The County charges on an actual cost basis for review of traffic studies. An initial deposit of $3400 is required at the time that a land use application is filed with the Department of Land Use Services If the review costs exceed the initial deposit, the applicant will be expected to provide additional funds and the review will be suspended until the additional funds are deposited.

Project Name:	VVR, LLC Project Number: P201400342 (APN:3066-251-07)

9. Contact Information:

Please submit a signed copy of this scope for approval by the Traffic Division. Draft scopes may be sent electronically. Final scope with signature should be submitted in person or by US Mail to:

County of San Bernardino
Dept. of Public Works, Traffic Division
825 E. 3rd Street, Rm 115
San Bernardino, CA 92415-0835

Phone: 909-387-8186
Fax: 909-387-7809
Email: epetre@dpw.sbcounty.gov (Ed Petre)

Table 1

Project Trip Generation[1]

Land Use	Quantity	Units[2]	Peak Hour						Daily
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
Trip Generation Rates									
Shopping Center		TSF	1.14	0.70	1.84	3.30	3.58	6.88	78.53
High Turn Over (Sit-Down) Restaurant		TSF	5.95	4.86	10.81	5.91	3.94	9.85	127.15
Fast Food with Drive-Thru Window		TSF	23.16	22.26	45.42	16.98	15.67	32.65	496.12
Service Station with Convenience Market		FP	5.08	5.08	10.16	6.75	6.76	13.51	162.78
Trips Generated									
Shopping Center[3]	66.013	TSF	75	46	121	218	236	454	5,184
Pass-by Shopping Center[4]	0/34/26	%	0	0	0	-74	-80	-154	0
High Turn Over (Sit-Down) Restaurant	4.100	TSF	24	20	44	24	16	40	521
Fast Food with Drive-Thru Window	2.400	TSF	56	53	109	41	38	79	1,191
Pass-by Fast Food with Drive-Thru[4]	49/50/0	%	-27	-26	-53	-21	-19	-40	0
Service Station with Convenience Market	12	FP	61	61	122	81	81	162	1,953
Pass-by Service Station with Convenience Mkt[4]	62/56/0	%	-38	-38	-76	-45	-45	-90	0
Total	76.473		151	116	267	224	227	451	8,849

Land Use	Description	Retail	Other
High Turn Over (Sit-Down) Restaurant	Pad A		4,100
Retail / Fast Food with Drive-Thru Window	Pad B	4,900	2,400
Service Station with Convenience Market	Pad C		3,960
Shopping Center	Pad D	5,000	
Shopping Center	Major A	12,000	
Shopping Center	Major A (outdoor)	5,243	
Shopping Center	Major B	12,355	
Shopping Center	Shops 1	7,527	
Shopping Center	Shops 2	8,400	
Shopping Center	Shops 3	10,588	
Subtotal		66,013	10,460
Total		76,473	

[1] Source: Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012, Land Use Codes 820, 932, 934 and 945.

[2] TSF = Thousand Square Foot, FP = Fueling Position

[3] Regression Equation for Office Code 820: DAILY TRIPS=EXP(0.65*LN(AREA in Thousands)+5.83).

[4] Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012, Passby percentages for 820, 934 and 945.

Figure 1
Project Location Map

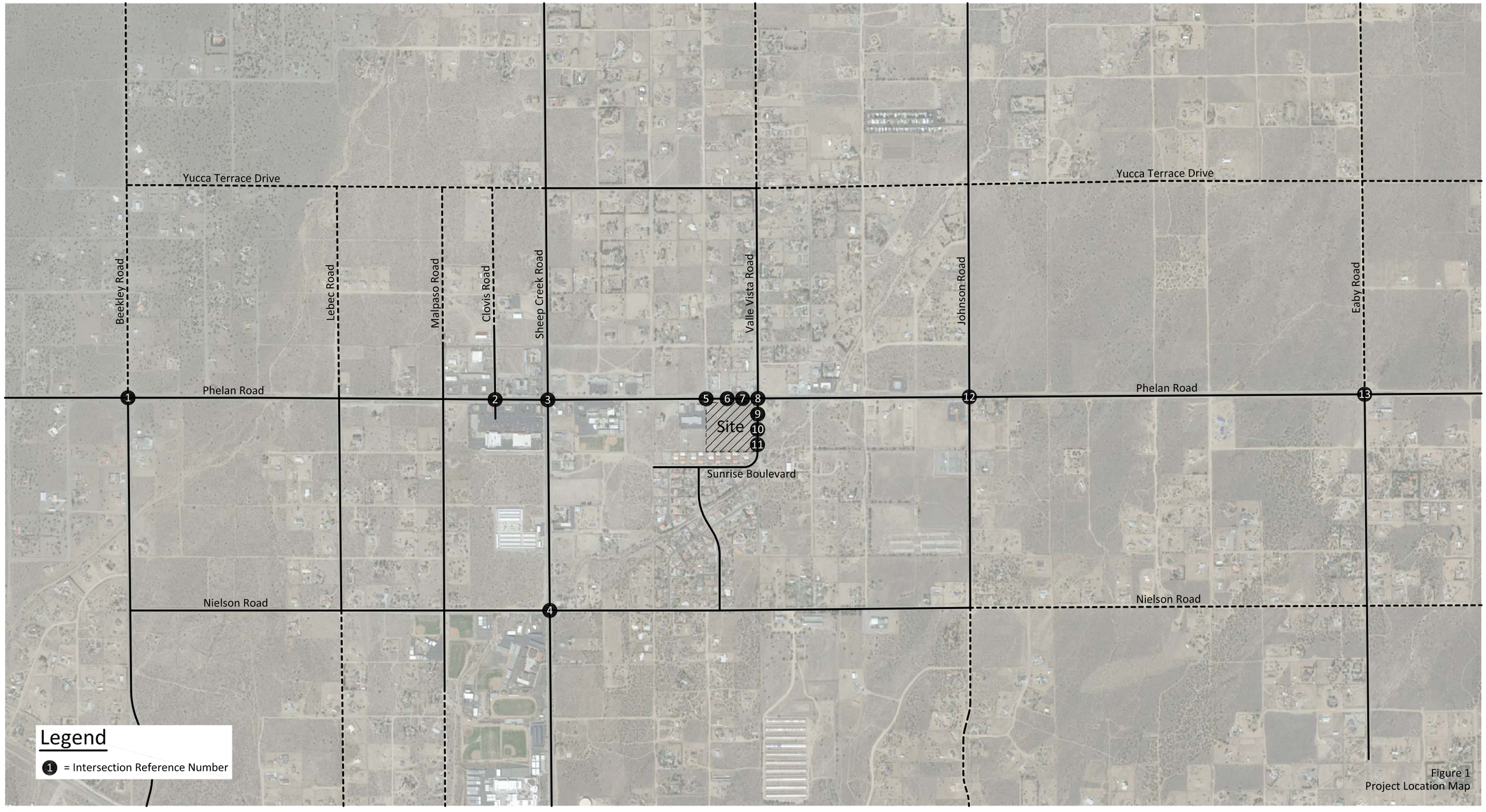


Figure 1
Project Location Map

5868/1

Figure 2
Site Plan

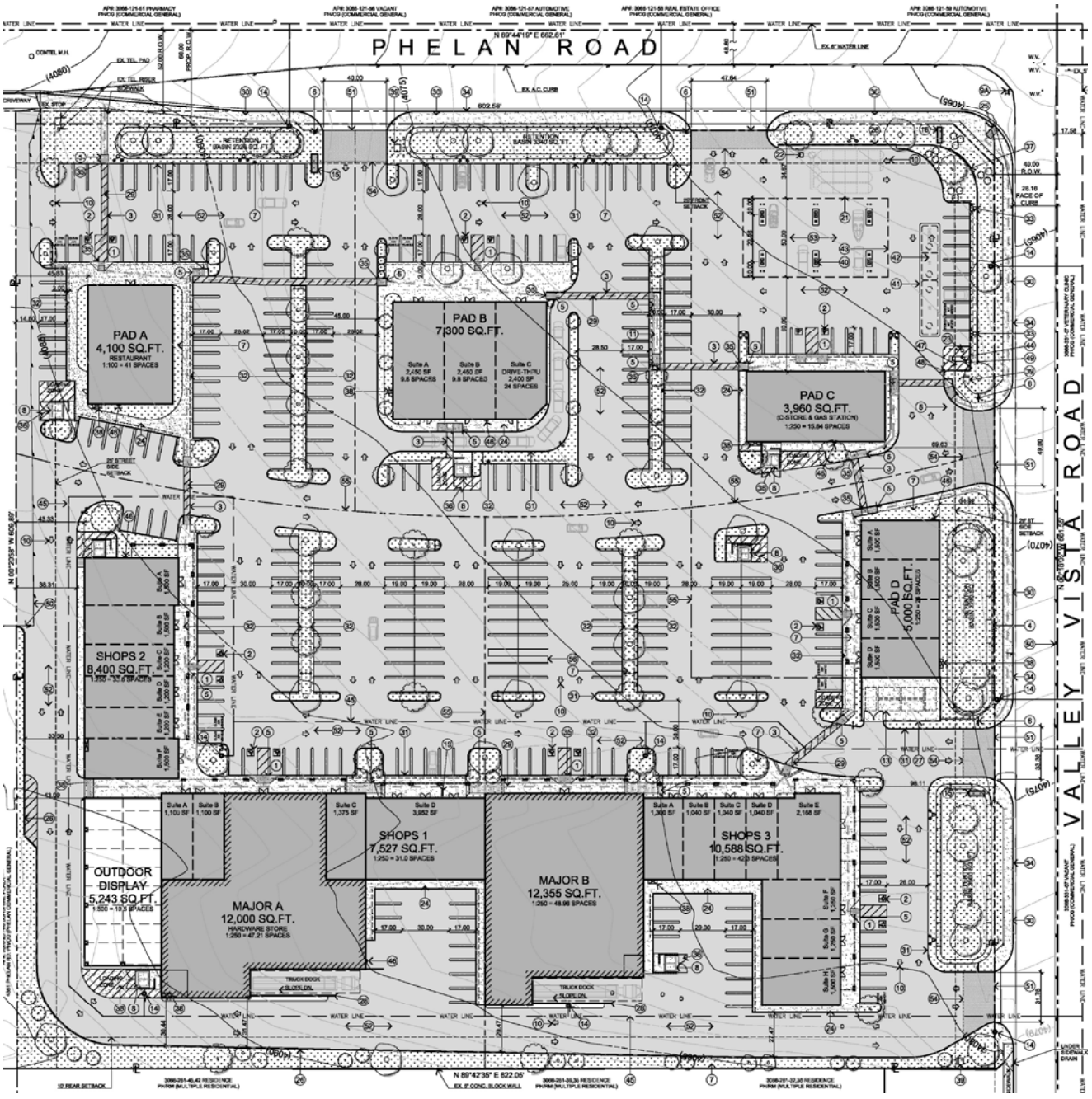


Figure 3
Project Trip Distribution

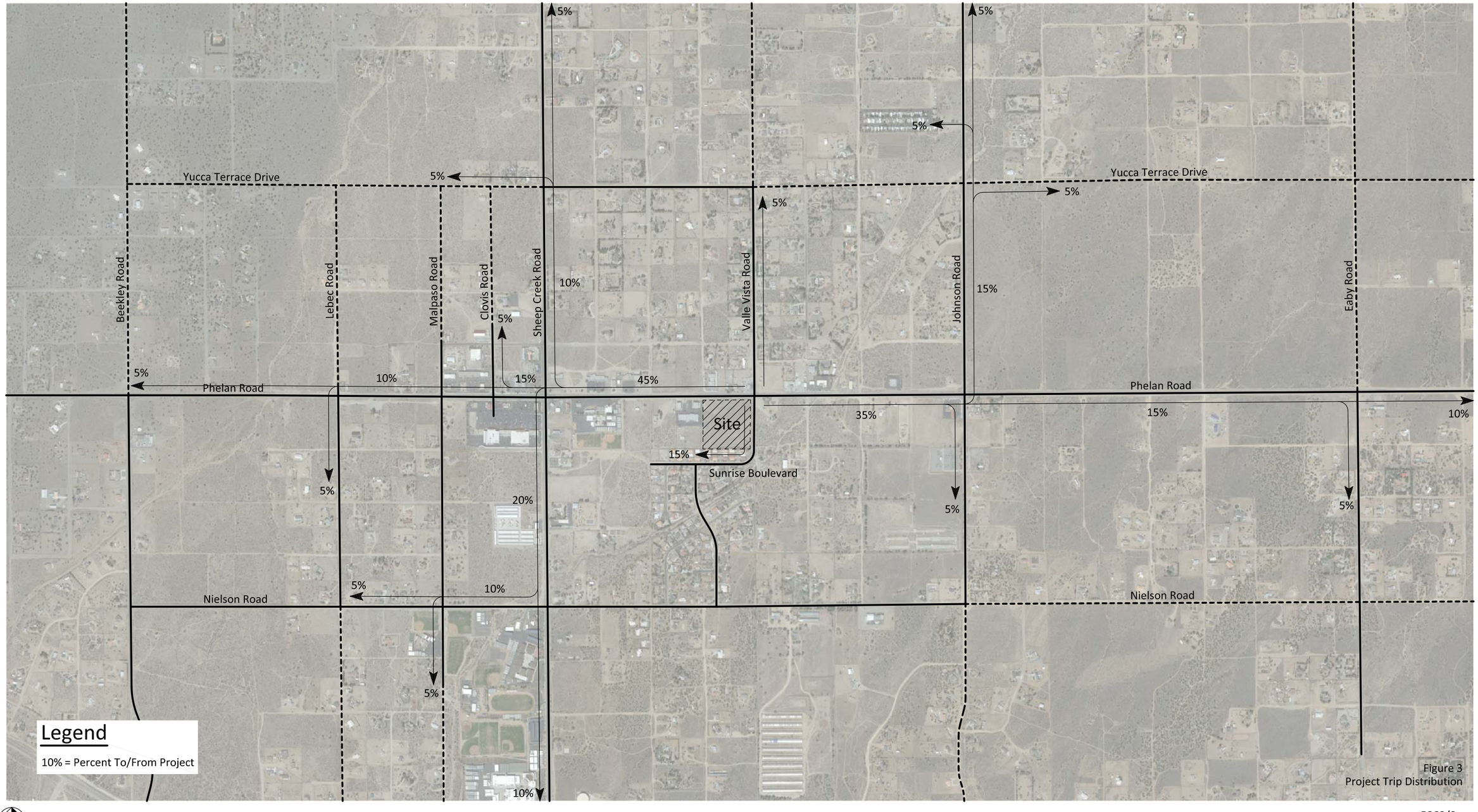


Figure 3
Project Trip Distribution

5868/3

APPENDIX C

Traffic Count Worksheets

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:					
12/9/14	LOCATION:	Phelan	PROJECT #:	SC0492	
TUESDAY	NORTH & SOUTH:	Beekley	LOCATION #:	1	
	EAST & WEST:	Phelan	CONTROL:	SIGNAL	

CLASS 1:	NOTES:	AM / PM / MD / OTHER / OTHER
PASSENGER VEHICLES		▲ N ◄ W E ► S ▼

	NORTHBOUND Beekley			SOUTHBOUND Beekley			EASTBOUND Phelan			WESTBOUND Phelan			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	1	1	1	1	0	
AM													
7:00 AM	2	0	13	2	3	0	0	25	1	58	21	0	125
7:15 AM	2	0	6	0	1	0	0	36	4	50	21	0	120
7:30 AM	1	1	9	1	4	0	1	45	3	36	35	0	136
7:45 AM	8	0	14	3	3	0	0	67	7	42	33	4	181
8:00 AM	2	1	14	0	1	0	0	60	6	44	35	0	163
8:15 AM	3	1	8	1	4	0	0	52	8	39	35	1	152
8:30 AM	1	0	12	0	3	1	0	29	6	35	34	1	122
8:45 AM	7	0	10	0	2	0	0	40	5	42	31	1	138
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	26	3	86	7	21	1	1	354	40	346	245	7	1,137
APPROACH %	23%	3%	75%	24%	72%	3%	0%	90%	10%	58%	41%	1%	
APP/DEPART	115	/	11	29	/	407	395	/	447	598	/	272	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	14	3	45	5	12	0	1	224	24	161	138	5	632
APPROACH %	23%	5%	73%	29%	71%	0%	0%	90%	10%	53%	45%	2%	
PEAK HR FACTOR		0.705			0.708			0.841			0.962		0.873
APP/DEPART	62	/	9	17	/	197	249	/	274	304	/	152	0
PM													
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	6	1	10	0	2	0	1	34	5	48	63	2	172
4:15 PM	4	2	9	2	0	0	1	77	4	63	73	4	239
4:30 PM	5	1	10	1	2	0	0	58	7	39	64	4	191
4:45 PM	2	0	9	3	1	0	0	48	3	50	53	2	171
5:00 PM	3	2	6	1	0	1	1	38	5	55	56	4	172
5:15 PM	3	2	9	3	0	0	1	46	2	51	53	0	170
5:30 PM	4	0	7	2	0	0	0	32	0	36	44	2	127
5:45 PM	2	0	4	0	0	2	0	46	3	31	31	2	121
VOLUMES	29	8	64	12	5	3	4	379	29	373	437	20	1,363
APPROACH %	29%	8%	63%	60%	25%	15%	1%	92%	7%	45%	53%	2%	
APP/DEPART	101	/	32	20	/	407	412	/	455	830	/	469	0
BEGIN PEAK HR		4:15 PM											
VOLUMES	14	5	34	7	3	1	2	221	19	207	246	14	773
APPROACH %	26%	9%	64%	64%	27%	9%	1%	91%	8%	44%	53%	3%	
PEAK HR FACTOR		0.779			0.688			0.738			0.834		0.809
APP/DEPART	53	/	21	11	/	229	242	/	262	467	/	261	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Beekley	LOCATION #:	1
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

		NORTHBOUND Beekley			SOUTHBOUND Beekley			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	3	3	0	7
	7:15 AM	0	0	1	0	0	0	0	1	0	4	4	0	10
	7:30 AM	0	0	0	0	0	0	0	8	0	4	3	0	15
	7:45 AM	0	0	4	0	0	0	0	4	0	3	5	1	17
	8:00 AM	1	0	1	0	0	0	0	0	0	3	2	0	7
	8:15 AM	0	0	3	0	0	0	0	4	0	7	3	0	17
	8:30 AM	0	0	2	1	0	0	1	3	0	1	6	0	14
	8:45 AM	1	0	3	0	0	0	0	0	0	3	2	0	9
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	2	0	14	1	0	0	1	21	0	28	28	1	96
	APPROACH %	13%	0%	88%	100%	0%	0%	5%	95%	0%	49%	49%	2%	
	APP/DEPART	16	/	2	1	/	28	22	/	36	57	/	30	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	1	0	8	0	0	0	0	16	0	17	13	1	56
	APPROACH %	11%	0%	89%	0%	0%	0%	0%	100%	0%	55%	42%	3%	
	PEAK HR FACTOR		0.563			0.000			0.500			0.775		0.824
	APP/DEPART	9	/	1	0	/	17	16	/	24	31	/	14	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	2	0	0	0	0	4	0	2	3	0	11
	4:15 PM	0	0	0	0	0	0	0	2	0	5	7	0	14
	4:30 PM	0	0	0	0	0	0	0	4	0	7	4	0	15
	4:45 PM	0	0	0	0	0	0	0	3	0	3	2	0	8
	5:00 PM	0	0	2	0	0	0	0	4	0	3	3	0	12
	5:15 PM	0	0	0	0	0	0	0	1	0	2	2	0	5
	5:30 PM	0	0	2	0	0	0	0	4	0	1	2	0	9
	5:45 PM	0	0	0	0	0	0	0	0	0	3	1	0	4
	VOLUMES	0	0	6	0	0	0	0	22	0	26	24	0	78
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	52%	48%	0%	
	APP/DEPART	6	/	0	0	/	26	22	/	28	50	/	24	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	2	0	0	0	0	13	0	18	16	0	49
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	53%	47%	0%	
	PEAK HR FACTOR		0.250			0.000			0.813			0.708		0.817
	APP/DEPART	2	/	0	0	/	18	13	/	15	34	/	16	0

Beekley

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Beekley

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Beekley	LOCATION #:	1
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 3:	NOTES:
3-AXLE TRUCKS	

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

	NORTHBOUND Beekley			SOUTHBOUND Beekley			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	0	1	3	0	0	4
7:15 AM	0	0	1	0	0	0	0	3	0	0	0	0	4
7:30 AM	0	0	3	0	0	0	0	1	0	0	6	0	10
7:45 AM	0	0	0	0	0	0	0	0	0	2	1	0	3
8:00 AM	0	0	1	0	0	0	0	2	0	0	5	0	8
8:15 AM	0	0	0	0	0	0	0	2	0	3	0	0	5
8:30 AM	0	0	0	0	0	0	0	2	0	2	2	0	6
8:45 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	5	0	0	0	0	11	1	10	16	0	43
APPROACH %	0%	0%	100%	0%	0%	0%	0%	92%	8%	38%	62%	0%	
APP/DEPART	5	/	0	0	/	11	12	/	16	26	/	16	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	0	0	4	0	0	0	0	5	0	5	12	0	26
APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	29%	71%	0%	
PEAK HR FACTOR		0.333			0.000			0.625			0.708		0.650
APP/DEPART	4	/	0	0	/	5	5	/	9	17	/	12	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	1	0	0	0	0	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	2	1	0	3
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
VOLUMES	1	0	0	0	0	0	0	7	1	3	5	0	17
APPROACH %	100%	0%	0%	0%	0%	0%	0%	88%	13%	38%	63%	0%	
APP/DEPART	1	/	0	0	/	4	8	/	7	8	/	6	0
BEGIN PEAK HR		4:15 PM											
VOLUMES	0	0	0	0	0	0	0	4	1	3	2	0	10
APPROACH %	0%	0%	0%	0%	0%	0%	0%	80%	20%	60%	40%	0%	
PEAK HR FACTOR		0.000			0.000			0.417			0.417		0.833
APP/DEPART	0	/	0	0	/	4	5	/	4	5	/	2	0

Beekley

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Beekley

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Beekley	LOCATION #:	1
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Beekley			SOUTHBOUND Beekley			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	1	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	2	0	1	2	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	2	0	1	0	0	3
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	5	2	5	4	0	16
APPROACH %	0%	0%	0%	0%	0%	0%	0%	71%	29%	56%	44%	0%	
APP/DEPART	0	/	0	0	/	7	7	/	5	9	/	4	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	0	0	0	0	0	0	0	3	2	1	4	0	10
APPROACH %	0%	0%	0%	0%	0%	0%	0%	60%	40%	20%	80%	0%	
PEAK HR FACTOR		0.000			0.000			0.625			0.417		0.500
APP/DEPART	0	/	0	0	/	3	5	/	3	5	/	4	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	2
5:45 PM	0	0	0	0	0	0	0	5	0	0	1	0	6
VOLUMES	0	0	0	0	0	0	0	8	0	4	3	0	15
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	57%	43%	0%	
APP/DEPART	0	/	0	0	/	4	8	/	8	7	/	3	0
BEGIN PEAK HR		5:00 PM											
VOLUMES	0	0	0	0	0	0	0	6	0	3	2	0	11
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	60%	40%	0%	
PEAK HR FACTOR		0.000			0.000			0.300			0.625		0.458
APP/DEPART	0	/	0	0	/	3	6	/	6	5	/	2	0

Beekley

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Beekley

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Beekley	LOCATION #:	1
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Beekley			SOUTHBOUND Beekley			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		9:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		5:45 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

Beekley

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Beekley

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Beekley	LOCATION #:	1
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Beekley			SOUTHBOUND Beekley			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	1	0	0	0	0	0	0	0	0	0	1	0	2
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	1	3	0	1	2	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	1	0	0	0	0	1	0	0	1	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	1	0	1	0	0	0	1	7	0	1	6	0	17
APPROACH %	50%	0%	50%	0%	0%	0%	13%	88%	0%	14%	86%	0%	
APP/DEPART	2	/	1	0	/	1	8	/	8	7	/	7	0
BEGIN PEAK HR		7:45 AM											
VOLUMES	0	0	1	0	0	0	1	4	0	1	5	0	12
APPROACH %	0%	0%	100%	0%	0%	0%	20%	80%	0%	17%	83%	0%	
PEAK HR FACTOR		0.250			0.000			0.313			0.500		0.429
APP/DEPART	1	/	1	0	/	1	5	/	5	6	/	5	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	4	0	2	1	0	7
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	67%	33%	0%	
APP/DEPART	0	/	0	0	/	2	4	/	4	3	/	1	0
BEGIN PEAK HR		4:15 PM											
VOLUMES	0	0	0	0	0	0	0	3	0	0	1	0	4
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
PEAK HR FACTOR		0.000			0.000			0.375			0.250		0.500
APP/DEPART	0	/	0	0	/	0	3	/	3	1	/	1	0

Beekley

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Beekley

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:					
12/9/14	LOCATION:	Phelan	PROJECT #:	SC0492	
TUESDAY	NORTH & SOUTH:	Clovis	LOCATION #:	2	
	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S	

CLASS 1:	NOTES:	AM		▲ N	
PASSENGER VEHICLES		PM	◄ W		E ►
		MD			
		OTHER		S ▼	
		OTHER			

	NORTHBOUND Clovis			SOUTHBOUND Clovis			EASTBOUND Phelan			WESTBOUND Phelan			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	0	1	2	0	1	2	0	
7:00 AM	6	0	8	0	1	4	2	39	4	4	67	5	140
7:15 AM	14	0	8	1	1	1	2	36	0	1	55	7	126
7:30 AM	5	2	6	3	0	3	2	52	6	1	48	4	132
7:45 AM	10	1	10	1	0	1	4	92	10	3	79	5	216
8:00 AM	6	2	11	2	0	6	6	51	8	6	63	7	168
8:15 AM	10	0	11	3	3	7	3	50	12	4	59	8	170
8:30 AM	2	0	10	4	1	6	1	35	7	2	64	10	142
8:45 AM	8	3	13	1	4	3	4	44	9	4	61	15	169
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
AM VOLUMES	61	8	77	15	10	31	24	399	56	25	496	61	1,263
AM APPROACH %	42%	5%	53%	27%	18%	55%	5%	83%	12%	4%	85%	10%	
AM APP/DEPART	146	/	93	56	/	91	479	/	491	582	/	588	0
AM BEGIN PEAK HR		7:45 AM											
AM VOLUMES	28	3	42	10	4	20	14	228	37	15	265	30	696
AM APPROACH %	38%	4%	58%	29%	12%	59%	5%	82%	13%	5%	85%	10%	
AM PEAK HR FACTOR		0.869			0.654			0.658			0.891		0.806
AM APP/DEPART	73	/	47	34	/	56	279	/	280	310	/	313	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	16	6	28	1	11	6	8	45	6	14	114	33	288
4:15 PM	18	9	15	10	10	8	9	59	11	11	98	21	279
4:30 PM	20	5	19	7	9	5	5	65	7	7	94	22	265
4:45 PM	21	4	13	6	6	8	6	55	9	18	98	7	251
5:00 PM	15	3	16	3	5	4	4	48	5	19	86	9	217
5:15 PM	15	5	15	6	4	2	6	49	11	6	77	10	206
5:30 PM	16	4	12	11	6	3	3	37	7	9	64	9	181
5:45 PM	12	2	15	8	3	3	5	42	6	5	58	10	169
PM VOLUMES	133	38	133	52	54	39	46	400	62	89	689	121	1,856
PM APPROACH %	44%	13%	44%	36%	37%	27%	9%	79%	12%	10%	77%	13%	
PM APP/DEPART	304	/	205	145	/	205	508	/	585	899	/	861	0
PM BEGIN PEAK HR		4:00 PM											
PM VOLUMES	75	24	75	24	36	27	28	224	33	50	404	83	1,083
PM APPROACH %	43%	14%	43%	28%	41%	31%	10%	79%	12%	9%	75%	15%	
PM PEAK HR FACTOR		0.870			0.777			0.902			0.834		0.940
PM APP/DEPART	174	/	135	87	/	119	285	/	323	537	/	506	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Clovis	LOCATION #:	2
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

	NORTHBOUND Clovis			SOUTHBOUND Clovis			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM													
7:00 AM	0	0	1	0	0	0	0	2	0	0	16	1	20
7:15 AM	2	2	1	0	0	0	1	3	1	0	20	2	32
7:30 AM	1	0	0	2	0	0	0	8	0	2	18	0	31
7:45 AM	2	0	1	1	0	0	0	3	0	0	25	0	32
8:00 AM	2	0	0	0	0	0	0	2	0	4	14	0	22
8:15 AM	1	0	2	0	0	0	1	5	1	2	20	2	34
8:30 AM	1	0	0	0	0	0	1	4	2	0	13	0	21
8:45 AM	0	1	2	0	0	0	0	2	0	1	10	1	17
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	9	3	7	3	0	0	3	29	4	9	136	6	209
APPROACH %	47%	16%	37%	100%	0%	0%	8%	81%	11%	6%	90%	4%	
APP/DEPART	19	/	12	3	/	13	36	/	39	151	/	145	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	6	0	3	3	0	0	1	18	1	8	77	2	119
APPROACH %	67%	0%	33%	100%	0%	0%	5%	90%	5%	9%	89%	2%	
PEAK HR FACTOR		0.750			0.375			0.625			0.870		0.875
APP/DEPART	9	/	3	3	/	9	20	/	24	87	/	83	0
PM													
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	2	0	1	0	0	0	0	4	0	1	6	0	14
4:15 PM	2	1	2	0	1	0	0	2	1	1	7	1	18
4:30 PM	1	1	0	0	0	1	1	4	1	2	6	0	17
4:45 PM	3	0	1	1	0	0	0	2	0	0	4	2	13
5:00 PM	1	0	2	1	0	1	0	2	2	0	5	1	15
5:15 PM	0	0	1	1	0	0	0	0	0	2	10	2	16
5:30 PM	0	0	0	0	0	0	0	4	0	1	5	0	10
5:45 PM	2	0	0	0	1	0	0	2	0	0	9	1	15
VOLUMES	11	2	7	3	2	2	1	20	4	7	52	7	118
APPROACH %	55%	10%	35%	43%	29%	29%	4%	80%	16%	11%	79%	11%	
APP/DEPART	20	/	10	7	/	13	25	/	30	66	/	65	0
BEGIN PEAK HR		4:15 PM											
VOLUMES	7	2	5	2	1	2	1	10	4	3	22	4	63
APPROACH %	50%	14%	36%	40%	20%	40%	7%	67%	27%	10%	76%	14%	
PEAK HR FACTOR		0.700			0.625			0.625			0.806		0.875
APP/DEPART	14	/	7	5	/	8	15	/	17	29	/	31	0

Clovis

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Clovis

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Clovis	LOCATION #:	2
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 3:	NOTES:
3-AXLE TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Clovis			SOUTHBOUND Clovis			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	2	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:00 AM	0	0	0	0	0	0	0	2	0	0	2	0	4
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
8:45 AM	0	0	0	0	0	1	1	0	0	0	1	0	3
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	1	1	6	0	0	8	0	16
APPROACH %	0%	0%	0%	0%	0%	100%	14%	86%	0%	0%	100%	0%	
APP/DEPART	0	/	1	1	/	0	7	/	6	8	/	9	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	0	0	0	0	0	0	0	5	0	0	6	0	11
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
PEAK HR FACTOR		0.000			0.000			0.625			0.750		0.688
APP/DEPART	0	/	0	0	/	0	5	/	5	6	/	6	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
4:45 PM	1	0	0	0	0	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	2	0	4
5:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	2
VOLUMES	1	0	0	0	0	1	0	6	0	1	5	0	14
APPROACH %	100%	0%	0%	0%	0%	100%	0%	100%	0%	17%	83%	0%	
APP/DEPART	1	/	0	1	/	1	6	/	6	6	/	7	0
BEGIN PEAK HR		5:00 PM											
VOLUMES	0	0	0	0	0	1	0	3	0	1	3	0	8
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	25%	75%	0%	
PEAK HR FACTOR		0.000			0.250			0.375			0.500		0.500
APP/DEPART	0	/	0	1	/	1	3	/	3	4	/	4	0

Clovis

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Clovis

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Clovis	LOCATION #:	2
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Clovis			SOUTHBOUND Clovis			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	1	0	0	3	0	4
	7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:15 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	2	0	0	1	0	3
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	6	0	0	7	0	13
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	6	/	6	7	/	7	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	0	0	0	0	0	0	3	0	0	6	0	9
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.750			0.500		0.563
	APP/DEPART	0	/	0	0	/	0	3	/	3	6	/	6	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	4
	VOLUMES	0	0	0	0	0	0	0	6	0	0	4	0	10
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	6	/	6	4	/	4	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	0	0	0	0	0	0	5	0	0	3	0	8
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.313			0.750		0.500
	APP/DEPART	0	/	0	0	/	0	5	/	5	3	/	3	0

Clovis

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Clovis

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Clovis	LOCATION #:	2
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Clovis			SOUTHBOUND Clovis			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		9:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	1	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	1	0	/	0	1	/	0	0	/	0	0
	BEGIN PEAK HR		5:15 PM											
	VOLUMES	0	0	0	0	0	0	2	0	0	0	0	0	2
	APPROACH %	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.500			0.000		0.500
	APP/DEPART	0	/	2	0	/	0	2	/	0	0	/	0	0

Clovis

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Clovis

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Clovis	LOCATION #:	2
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Clovis			SOUTHBOUND Clovis			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
7:45 AM	0	0	0	0	0	0	0	3	0	0	3	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	2	0	0	1	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	7	0	0	8	2	17
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	80%	20%	
APP/DEPART	0	/	2	0	/	0	7	/	7	10	/	8	0
BEGIN PEAK HR		7:45 AM											
VOLUMES	0	0	0	0	0	0	0	5	0	0	5	2	12
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	71%	29%	
PEAK HR FACTOR		0.000			0.000			0.417			0.583		0.500
APP/DEPART	0	/	2	0	/	0	5	/	5	7	/	5	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	1	3
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	3	0	0	4	2	9
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	67%	33%	
APP/DEPART	0	/	2	0	/	0	3	/	3	6	/	4	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	0	0	0	0	0	0	0	3	0	0	2	1	6
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	67%	33%	
PEAK HR FACTOR		0.000			0.000			0.375			0.250		0.500
APP/DEPART	0	/	1	0	/	0	3	/	3	3	/	2	0

Clovis

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Clovis

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	3
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 1:	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼
PASSENGER VEHICLES			

	NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Phelan			WESTBOUND Phelan			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	
AM													
7:00 AM	17	32	12	7	8	33	9	42	1	5	45	11	222
7:15 AM	2	17	17	11	15	18	6	46	3	9	56	2	202
7:30 AM	3	12	21	20	8	20	2	49	4	12	62	8	221
7:45 AM	14	22	29	38	25	24	14	75	4	23	70	7	345
8:00 AM	13	21	23	26	15	19	12	37	8	54	103	12	343
8:15 AM	14	30	25	16	25	20	6	56	13	29	78	7	319
8:30 AM	11	19	24	14	21	14	7	46	7	16	49	3	231
8:45 AM	29	38	30	11	49	21	5	39	4	30	58	8	322
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	103	191	181	143	166	169	61	390	44	178	521	58	2,205
APPROACH %	22%	40%	38%	30%	35%	35%	12%	79%	9%	24%	69%	8%	
APP/DEPART	475	/	310	478	/	388	495	/	714	757	/	793	0
BEGIN PEAK HR		7:45 AM											
VOLUMES	52	92	101	94	86	77	39	214	32	122	300	29	1,238
APPROACH %	21%	38%	41%	37%	33%	30%	14%	75%	11%	27%	67%	6%	
PEAK HR FACTOR		0.888			0.739			0.766			0.667		0.897
APP/DEPART	245	/	160	257	/	240	285	/	409	451	/	429	0
PM													
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	27	34	33	30	20	26	25	51	7	28	86	15	382
4:15 PM	31	36	43	28	17	20	19	54	10	23	93	12	386
4:30 PM	25	39	51	25	27	23	15	92	11	28	92	10	438
4:45 PM	23	36	44	28	23	26	24	73	8	20	92	8	405
5:00 PM	14	33	43	23	22	21	23	71	7	23	83	11	374
5:15 PM	19	32	42	15	16	20	16	70	4	26	82	10	352
5:30 PM	14	25	39	25	24	17	19	52	4	26	71	7	323
5:45 PM	12	39	19	18	21	12	15	64	11	12	54	18	295
VOLUMES	165	274	314	192	170	165	156	527	62	186	653	91	2,955
APPROACH %	22%	36%	42%	36%	32%	31%	21%	71%	8%	20%	70%	10%	
APP/DEPART	753	/	521	527	/	418	745	/	1,033	930	/	983	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	106	145	171	111	87	95	83	270	36	99	363	45	1,611
APPROACH %	25%	34%	41%	38%	30%	32%	21%	69%	9%	20%	72%	9%	
PEAK HR FACTOR		0.917			0.951			0.824			0.975		0.920
APP/DEPART	422	/	273	293	/	222	389	/	552	507	/	564	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	3
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

		NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	1	1	1	1	4	0	2	0	0	2	0	12
	7:15 AM	0	1	3	0	2	1	0	4	0	1	8	0	20
	7:30 AM	0	1	1	1	0	2	1	6	1	2	6	1	22
	7:45 AM	1	1	1	2	0	2	2	10	1	1	4	0	25
	8:00 AM	2	0	2	0	0	2	0	4	0	0	5	1	16
	8:15 AM	2	2	2	3	1	1	1	3	1	1	5	1	23
	8:30 AM	2	2	4	1	1	0	0	2	0	1	5	0	18
	8:45 AM	0	2	2	2	1	4	1	4	0	1	7	1	25
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	7	10	16	10	6	16	5	35	3	7	42	4	161
	APPROACH %	21%	30%	48%	31%	19%	50%	12%	81%	7%	13%	79%	8%	
	APP/DEPART	33	/	19	32	/	16	43	/	61	53	/	65	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	5	4	6	6	1	7	4	23	3	4	20	3	86
	APPROACH %	33%	27%	40%	43%	7%	50%	13%	77%	10%	15%	74%	11%	
	PEAK HR FACTOR		0.625			0.700			0.577			0.750		0.860
	APP/DEPART	15	/	11	14	/	8	30	/	35	27	/	32	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	1	4	0	0	1	0	7	0	2	5	1	21
	4:15 PM	2	0	1	1	1	0	1	2	0	3	5	2	18
	4:30 PM	1	0	0	0	0	2	0	3	0	1	3	0	10
	4:45 PM	0	1	2	2	0	1	0	1	0	0	4	0	11
	5:00 PM	2	5	5	0	0	0	0	6	0	1	6	0	25
	5:15 PM	2	1	1	1	0	0	0	5	0	0	4	0	14
	5:30 PM	1	0	1	2	0	0	1	3	0	0	2	0	10
	5:45 PM	0	3	1	0	0	0	0	1	0	0	2	0	7
	VOLUMES	8	11	15	6	1	4	2	28	0	7	31	3	116
	APPROACH %	24%	32%	44%	55%	9%	36%	7%	93%	0%	17%	76%	7%	
	APP/DEPART	34	/	16	11	/	8	30	/	49	41	/	43	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	5	6	8	3	1	3	1	12	0	5	18	2	64
	APPROACH %	26%	32%	42%	43%	14%	43%	8%	92%	0%	20%	72%	8%	
	PEAK HR FACTOR		0.396			0.583			0.542			0.625		0.640
	APP/DEPART	19	/	9	7	/	6	13	/	23	25	/	26	0

Sheep Creek

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Sheep Creek

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	3
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 3:	NOTES:
3-AXLE TRUCKS	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	2	0	0	0	3	0	0	0	0	0	0	5
	7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	0	0	0	1	1	0	1	1	4
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	1	0	1	0	0	0	1	0	0	0	1	0	4
	8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:30 AM	1	0	1	0	0	0	0	1	0	0	2	0	5
	8:45 AM	0	0	0	0	1	0	0	1	0	0	3	0	5
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	2	2	2	1	1	3	1	4	1	0	7	1	25
	APPROACH %	33%	33%	33%	20%	20%	60%	17%	67%	17%	0%	88%	13%	
	APP/DEPART	6	/	4	5	/	2	6	/	7	8	/	12	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	2	0	2	0	1	0	1	3	0	0	6	0	15
	APPROACH %	50%	0%	50%	0%	100%	0%	25%	75%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.500			0.250			1.000			0.500		0.750
	APP/DEPART	4	/	1	1	/	1	4	/	5	6	/	8	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	1	0	0	0	0	0	2	0	0	1	1	5
	4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	2	0	0	2	0	4
	4:45 PM	0	0	1	0	0	0	0	0	0	0	4	0	5
	5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	1	0	0	0	1	0	0	0	0	1	0	3
	5:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	4
	5:45 PM	1	1	0	1	0	0	0	1	0	0	2	0	6
	VOLUMES	1	4	2	1	0	1	0	9	0	0	10	1	29
	APPROACH %	14%	57%	29%	50%	0%	50%	0%	100%	0%	0%	91%	9%	
	APP/DEPART	7	/	5	2	/	0	9	/	12	11	/	12	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	1	2	0	0	0	0	4	0	0	7	1	15
	APPROACH %	0%	33%	67%	0%	0%	0%	0%	100%	0%	0%	88%	13%	
	PEAK HR FACTOR		0.750			0.000			0.500			0.500		0.750
	APP/DEPART	3	/	2	0	/	0	4	/	6	8	/	7	0

Sheep Creek

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Sheep Creek

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	3
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	2	0	0	0	0	1	0	0	5	0	8
	7:45 AM	0	1	0	0	0	1	0	2	0	0	2	0	6
	8:00 AM	0	1	0	0	0	0	0	1	0	0	3	0	5
	8:15 AM	0	0	0	1	0	0	0	1	1	0	2	0	5
	8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	2
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	4	2	1	0	2	0	8	1	0	13	0	31
	APPROACH %	0%	67%	33%	33%	0%	67%	0%	89%	11%	0%	100%	0%	
	APP/DEPART	6	/	4	3	/	1	9	/	11	13	/	15	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	2	2	1	0	1	0	5	1	0	12	0	24
	APPROACH %	0%	50%	50%	50%	0%	50%	0%	83%	17%	0%	100%	0%	
	PEAK HR FACTOR		0.500			0.500			0.750			0.600		0.750
	APP/DEPART	4	/	2	2	/	1	6	/	8	12	/	13	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	2
	4:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	2
	4:30 PM	0	1	0	0	0	1	0	1	0	0	1	0	4
	4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
	5:00 PM	0	1	0	0	0	0	0	1	0	0	1	0	3
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	1	0	0	1	0	0	0	0	1	0	3
	5:45 PM	0	0	1	0	0	1	1	4	0	0	0	0	7
	VOLUMES	0	4	2	0	0	4	1	7	0	0	5	1	24
	APPROACH %	0%	67%	33%	0%	0%	100%	13%	88%	0%	0%	83%	17%	
	APP/DEPART	6	/	6	4	/	0	8	/	9	6	/	9	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	1	2	0	0	2	1	5	0	0	3	0	14
	APPROACH %	0%	33%	67%	0%	0%	100%	17%	83%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.750			0.500			0.300			0.750		0.500
	APP/DEPART	3	/	2	2	/	0	6	/	7	3	/	5	0

Sheep Creek

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Sheep Creek

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	3
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR		9:45 AM											
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR		5:45 PM											
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

Sheep Creek

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Sheep Creek

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

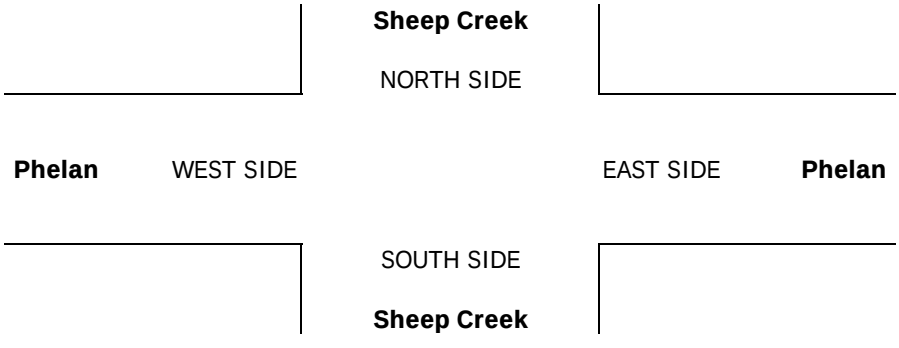
DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	3
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM													
7:00 AM	0	3	0	0	0	0	0	1	0	0	0	0	4
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	1	0	1	0	0	1	0	0	0	0	0	0	3
7:45 AM	0	1	0	2	0	1	1	4	0	0	2	0	11
8:00 AM	0	1	0	2	0	0	0	0	0	0	3	0	6
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	1	0	0	0	1	0	1	0	4
8:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	2	6	1	4	2	2	1	6	1	0	6	0	31
APPROACH %	22%	67%	11%	50%	25%	25%	13%	75%	13%	0%	100%	0%	
APP/DEPART	9	/	7	8	/	3	8	/	11	6	/	10	0
BEGIN PEAK HR		7:45 AM											
VOLUMES	0	3	0	4	1	1	1	4	1	0	6	0	21
APPROACH %	0%	100%	0%	67%	17%	17%	17%	67%	17%	0%	100%	0%	
PEAK HR FACTOR		0.375			0.500			0.300			0.500		0.477
APP/DEPART	3	/	4	6	/	2	6	/	8	6	/	7	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	0	0	0	0	0	2	0	3
4:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	2
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	1	0	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	1	0	1	2	1	1	0	3	0	0	3	0	12
APPROACH %	50%	0%	50%	50%	25%	25%	0%	100%	0%	0%	100%	0%	
APP/DEPART	2	/	0	4	/	1	3	/	6	3	/	5	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	0	0	1	1	1	0	0	3	0	0	2	0	8
APPROACH %	0%	0%	100%	50%	50%	0%	0%	100%	0%	0%	100%	0%	
PEAK HR FACTOR		0.250			0.500			0.750			0.250		0.667
APP/DEPART	1	/	0	2	/	1	3	/	5	2	/	2	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:					
12/9/14	LOCATION:	Phelan	PROJECT #:	SC0492	
TUESDAY	NORTH & SOUTH:	Sheep Creek	LOCATION #:	7	
	EAST & WEST:	Nielson	CONTROL:	SIGNAL	

CLASS 1: PASSENGER VEHICLES	NOTES:	AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Nielson			WESTBOUND Nielson			
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	5	48	27	3	9	7	0	6	1	8	19	3	136
	7:15 AM	2	37	25	2	9	6	3	8	4	6	8	3	113
	7:30 AM	8	37	33	5	12	10	5	9	3	10	35	6	173
	7:45 AM	15	49	32	4	17	10	11	18	4	7	37	8	212
	8:00 AM	6	57	33	7	32	14	7	17	4	14	20	9	220
	8:15 AM	17	64	28	2	47	13	3	5	5	10	20	3	217
	8:30 AM	16	60	27	3	44	10	5	9	7	20	18	4	223
	8:45 AM	19	87	37	1	45	21	6	8	6	27	29	5	291
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	88	439	242	27	215	91	40	80	34	102	186	41	1,585
	APPROACH %	11%	57%	31%	8%	65%	27%	26%	52%	22%	31%	57%	12%	
	APP/DEPART	769	/	520	333	/	351	154	/	349	329	/	365	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	58	268	125	13	168	58	21	39	22	71	87	21	951
	APPROACH %	13%	59%	28%	5%	70%	24%	26%	48%	27%	40%	49%	12%	
	PEAK HR FACTOR		0.788			0.892			0.732			0.734		0.817
	APP/DEPART	451	/	310	239	/	261	82	/	177	179	/	203	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	13	73	42	2	21	28	9	12	8	15	20	8	251
	4:15 PM	11	82	47	4	20	18	9	7	4	14	11	9	236
	4:30 PM	14	113	58	5	33	27	5	10	2	12	9	4	292
	4:45 PM	16	91	46	3	18	17	5	6	5	10	10	9	236
	5:00 PM	10	71	22	4	11	18	6	7	3	6	16	5	179
	5:15 PM	9	71	24	8	17	22	0	5	4	9	14	6	189
	5:30 PM	5	74	18	4	27	17	1	4	3	5	8	4	170
	5:45 PM	3	55	9	5	21	19	3	0	4	11	8	3	141
	VOLUMES	81	630	266	35	168	166	38	51	33	82	96	48	1,694
	APPROACH %	8%	64%	27%	9%	46%	45%	31%	42%	27%	36%	42%	21%	
	APP/DEPART	977	/	716	369	/	283	122	/	352	226	/	343	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	54	359	193	14	92	90	28	35	19	51	50	30	1,015
	APPROACH %	9%	59%	32%	7%	47%	46%	34%	43%	23%	39%	38%	23%	
	PEAK HR FACTOR		0.819			0.754			0.707			0.762		0.869
	APP/DEPART	606	/	417	196	/	162	82	/	242	131	/	194	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	7
TUESDAY	EAST & WEST:	Nielson	CONTROL:	SIGNAL

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Nielson			WESTBOUND Nielson			
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	2	2	1	0	2	1	0	0	1	1	1	0	11
	7:15 AM	0	4	5	2	1	1	0	1	1	2	1	1	19
	7:30 AM	1	2	0	0	0	2	0	0	0	0	1	1	7
	7:45 AM	0	3	0	0	0	2	0	0	0	0	1	0	6
	8:00 AM	1	1	0	0	0	0	2	0	0	0	0	1	5
	8:15 AM	0	3	2	0	0	1	0	0	2	0	1	0	9
	8:30 AM	0	4	0	0	2	2	1	0	0	2	1	0	12
	8:45 AM	2	5	2	1	1	1	0	0	0	0	0	1	13
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	6	24	10	3	6	10	3	1	4	5	6	4	82
	APPROACH %	15%	60%	25%	16%	32%	53%	38%	13%	50%	33%	40%	27%	
	APP/DEPART	40	/	31	19	/	15	8	/	14	15	/	22	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	3	11	6	2	3	6	0	1	2	3	4	2	43
	APPROACH %	15%	55%	30%	18%	27%	55%	0%	33%	67%	33%	44%	22%	
	PEAK HR FACTOR		0.556			0.688			0.375			0.563		0.566
	APP/DEPART	20	/	13	11	/	8	3	/	9	9	/	13	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	7	2	0	1	0	0	1	0	0	0	0	11
	4:15 PM	0	1	2	1	1	0	0	0	0	0	0	1	6
	4:30 PM	1	4	3	0	0	1	0	0	0	0	0	0	9
	4:45 PM	0	8	6	0	0	1	0	0	0	0	1	1	17
	5:00 PM	1	9	3	1	2	2	0	0	0	1	1	0	20
	5:15 PM	0	2	3	0	0	0	0	1	0	0	0	0	6
	5:30 PM	0	5	5	0	1	0	0	0	1	0	1	0	13
	5:45 PM	0	4	4	0	0	0	0	0	0	1	0	0	9
	VOLUMES	2	40	28	2	5	4	0	2	1	2	3	2	91
	APPROACH %	3%	57%	40%	18%	45%	36%	0%	67%	33%	29%	43%	29%	
	APP/DEPART	70	/	42	11	/	8	3	/	32	7	/	9	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	1	24	17	1	3	3	0	1	1	1	3	1	56
	APPROACH %	2%	57%	40%	14%	43%	43%	0%	50%	50%	20%	60%	20%	
	PEAK HR FACTOR		0.750			0.350			0.500			0.625		0.700
	APP/DEPART	42	/	25	7	/	5	2	/	19	5	/	7	0

Sheep Creek

NORTH SIDE

Nielson WEST SIDE EAST SIDE **Nielson**

SOUTH SIDE

INTERSECTION TURNING MOVEMENT COUNTS

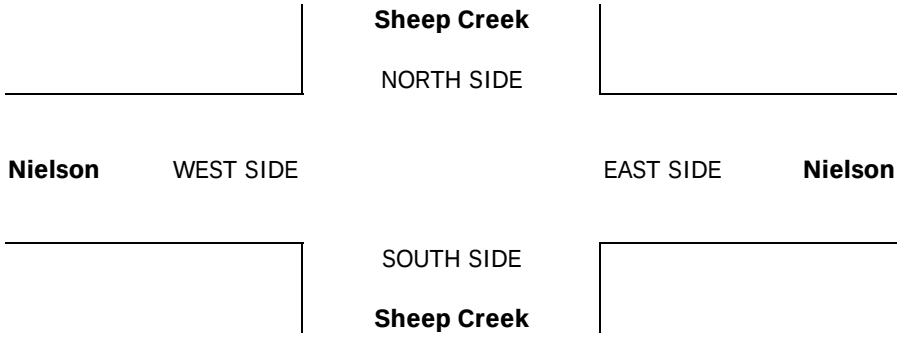
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	7
TUESDAY	EAST & WEST:	Nielson	CONTROL:	SIGNAL

CLASS 3:	NOTES:
3-AXLE TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Nielson			WESTBOUND Nielson			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
8:45 AM	1	0	0	0	0	0	1	0	0	0	1	0	3
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	2	0	0	1	2	0	2	2	0	0	1	0	10
APPROACH %	100%	0%	0%	33%	67%	0%	50%	50%	0%	0%	100%	0%	
APP/DEPART	2	/	2	3	/	2	4	/	3	1	/	3	0
BEGIN PEAK HR		8:00 AM											
VOLUMES	1	0	0	1	0	0	2	2	0	0	1	0	7
APPROACH %	100%	0%	0%	100%	0%	0%	50%	50%	0%	0%	100%	0%	
PEAK HR FACTOR		0.250			0.250			0.500			0.250		0.583
APP/DEPART	1	/	2	1	/	0	4	/	3	1	/	2	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	5	0	0	0	0	0	0	0	0	0	1	6
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
APP/DEPART	5	/	6	0	/	0	0	/	0	1	/	0	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	0	4	0	0	0	0	0	0	0	0	0	0	4
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.500			0.000			0.000			0.000		0.500
APP/DEPART	4	/	4	0	/	0	0	/	0	0	/	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

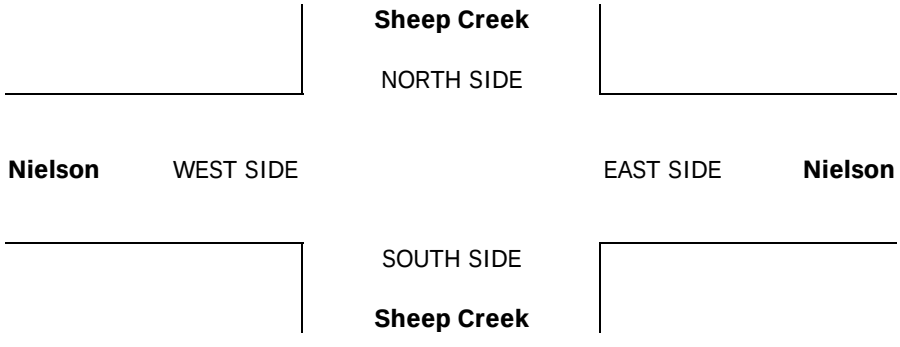
DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	7
TUESDAY	EAST & WEST:	Nielson	CONTROL:	SIGNAL

CLASS 4:	NOTES:
4 OR MORE AXLE TRUCKS	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Nielson			WESTBOUND Nielson			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	1	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	1	5	0	0	0	0	0	1	0	0	0	0	7
APPROACH %	17%	83%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	
APP/DEPART	6	/	5	0	/	0	1	/	1	0	/	1	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	1	4	0	0	0	0	0	1	0	0	0	0	6
APPROACH %	20%	80%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	
PEAK HR FACTOR		0.625			0.000			0.250			0.000		0.750
APP/DEPART	5	/	4	0	/	0	1	/	1	0	/	1	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
VOLUMES	0	5	0	0	0	0	0	0	0	0	0	0	5
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	5	/	5	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR		5:00 PM											
VOLUMES	0	3	0	0	0	0	0	0	0	0	0	0	3
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.375			0.000			0.000			0.000		0.375
APP/DEPART	3	/	3	0	/	0	0	/	0	0	/	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	7
TUESDAY	EAST & WEST:	Nielson	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Nielson			WESTBOUND Nielson			
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		9:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		5:45 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

Sheep Creek

NORTH SIDE

Nielson WEST SIDE EAST SIDE **Nielson**

SOUTH SIDE

Sheep Creek

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Sheep Creek	LOCATION #:	7
TUESDAY	EAST & WEST:	Nielson	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Sheep Creek			SOUTHBOUND Sheep Creek			EASTBOUND Nielson			WESTBOUND Nielson			
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	3	1	0	0	0	0	0	0	1	0	0	5
	7:15 AM	0	1	3	0	0	0	0	0	0	0	0	0	4
	7:30 AM	0	2	0	0	0	0	1	1	0	2	1	0	7
	7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	1	7	0	2	0	0	0	1	3	0	0	14
	8:45 AM	0	0	2	0	1	0	0	0	0	0	0	0	3
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	7	13	0	3	0	2	2	1	6	2	0	36
	APPROACH %	0%	35%	65%	0%	100%	0%	40%	40%	20%	75%	25%	0%	
	APP/DEPART	20	/	9	3	/	10	5	/	15	8	/	2	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	1	9	0	3	0	1	0	1	3	0	0	18
	APPROACH %	0%	10%	90%	0%	100%	0%	50%	0%	50%	100%	0%	0%	
	PEAK HR FACTOR		0.313			0.375			0.250			0.250		0.321
	APP/DEPART	10	/	2	3	/	7	2	/	9	3	/	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	2
	4:15 PM	0	0	2	0	1	0	0	0	0	0	0	0	3
	4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	2
	5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	2	5	0	1	1	0	0	0	0	0	0	9
	APPROACH %	0%	29%	71%	0%	50%	50%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	7	/	2	2	/	1	0	/	5	0	/	1	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	1	5	0	1	1	0	0	0	0	0	0	8
	APPROACH %	0%	17%	83%	0%	50%	50%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.750			0.500			0.000			0.000		0.667
	APP/DEPART	6	/	1	2	/	1	0	/	5	0	/	1	0

Sheep Creek

NORTH SIDE

Nielson WEST SIDE EAST SIDE **Nielson**

SOUTH SIDE

Sheep Creek

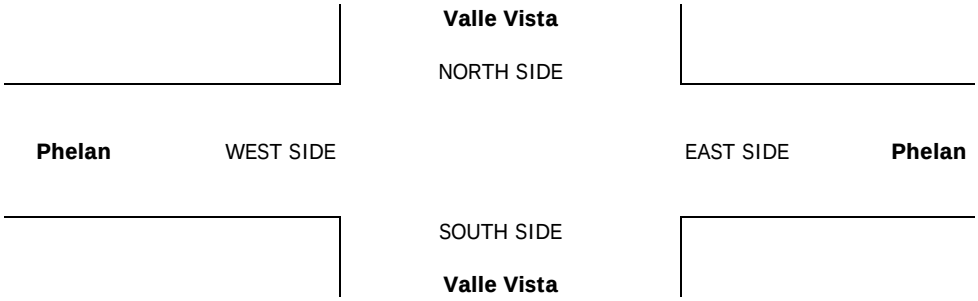
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:					
12/9/14	LOCATION:	Phelan	PROJECT #:	SC0492	
TUESDAY	NORTH & SOUTH:	Valle Vista	LOCATION #:	4	
	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S	

CLASS 1:	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼
PASSENGER VEHICLES			

	NORTHBOUND Valle Vista			SOUTHBOUND Valle Vista			EASTBOUND Phelan			WESTBOUND Phelan			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	1	1	0	
7:00 AM	4	0	2	2	0	6	3	52	0	0	42	1	112
7:15 AM	2	0	3	3	0	4	1	63	2	0	68	2	148
7:30 AM	1	1	7	2	1	3	4	66	3	3	98	3	192
7:45 AM	1	0	5	3	1	5	8	84	5	2	111	3	228
8:00 AM	1	0	5	4	0	3	6	84	4	1	128	3	239
8:15 AM	2	0	1	0	0	3	1	90	4	5	63	2	171
8:30 AM	0	1	3	2	2	5	2	70	3	2	78	1	169
8:45 AM	0	2	1	3	0	7	3	69	1	1	93	2	182
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
AM VOLUMES	11	4	27	19	4	36	28	578	22	14	681	17	1,441
AM APPROACH %	26%	10%	64%	32%	7%	61%	4%	92%	4%	2%	96%	2%	
AM APP/DEPART	42	/	49	59	/	40	628	/	624	712	/	728	0
AM BEGIN PEAK HR		7:30 AM											
AM VOLUMES	5	1	18	9	2	14	19	324	16	11	400	11	830
AM APPROACH %	21%	4%	75%	36%	8%	56%	5%	90%	4%	3%	95%	3%	
AM PEAK HR FACTOR		0.667			0.694			0.925			0.799		0.868
AM APP/DEPART	24	/	31	25	/	29	359	/	351	422	/	419	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	1	0	1	3	0	3	6	129	3	4	127	3	280
4:15 PM	1	0	4	2	0	4	5	116	2	2	123	2	261
4:30 PM	2	0	2	0	0	4	10	146	4	4	121	7	300
4:45 PM	2	0	2	5	0	5	5	138	3	8	117	3	288
5:00 PM	4	0	2	12	0	7	5	132	3	3	105	3	276
5:15 PM	2	1	1	2	0	3	5	144	4	2	90	4	258
5:30 PM	1	0	2	1	0	5	5	123	3	2	83	5	230
5:45 PM	0	0	1	0	1	3	3	84	1	3	79	4	179
PM VOLUMES	13	1	15	25	1	34	44	1,012	23	28	845	31	2,072
PM APPROACH %	45%	3%	52%	42%	2%	57%	4%	94%	2%	3%	93%	3%	
PM APP/DEPART	29	/	76	60	/	52	1,079	/	1,052	904	/	892	0
PM BEGIN PEAK HR		4:00 PM											
PM VOLUMES	6	0	9	10	0	16	26	529	12	18	488	15	1,129
PM APPROACH %	40%	0%	60%	38%	0%	62%	5%	93%	2%	3%	94%	3%	
PM PEAK HR FACTOR		0.750			0.650			0.886			0.972		0.941
PM APP/DEPART	15	/	41	26	/	30	567	/	548	521	/	510	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Valle Vista	LOCATION #:	4
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

	NORTHBOUND Valle Vista			SOUTHBOUND Valle Vista			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
AM 7:00 AM	0	0	0	0	0	0	0	2	0	0	17	0	19
7:15 AM	0	0	0	0	0	0	1	3	1	0	14	1	20
7:30 AM	1	0	0	0	0	0	0	8	0	0	21	0	30
7:45 AM	0	0	0	0	0	0	0	3	0	0	9	0	12
8:00 AM	0	0	0	0	0	1	0	0	1	0	5	0	7
8:15 AM	0	0	0	1	0	1	0	2	0	0	8	0	12
8:30 AM	0	0	0	0	0	1	0	5	0	0	7	0	13
8:45 AM	0	0	0	0	0	1	0	5	0	0	11	1	18
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	1	0	0	1	0	4	1	28	2	0	92	2	131
APPROACH %	100%	0%	0%	20%	0%	80%	3%	90%	6%	0%	98%	2%	
APP/DEPART	1	/	3	5	/	2	31	/	29	94	/	97	0
BEGIN PEAK HR		7:00 AM											
VOLUMES	1	0	0	0	0	0	1	16	1	0	61	1	81
APPROACH %	100%	0%	0%	0%	0%	0%	6%	89%	6%	0%	98%	2%	
PEAK HR FACTOR		0.250			0.000			0.563			0.738		0.675
APP/DEPART	1	/	2	0	/	1	18	/	16	62	/	62	0
PM 03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	1	0	0	0	0	0	1	7	0	0	6	0	15
4:15 PM	1	0	1	2	0	1	0	4	0	0	4	2	15
4:30 PM	0	0	0	1	0	0	1	3	0	0	4	0	9
4:45 PM	0	0	0	0	0	0	2	2	0	0	7	0	11
5:00 PM	0	0	0	0	0	2	0	3	0	0	4	0	9
5:15 PM	0	0	0	1	0	0	0	0	0	0	17	0	18
5:30 PM	0	0	0	0	0	1	0	6	0	0	13	0	20
5:45 PM	0	0	0	0	0	1	1	6	0	1	13	1	23
VOLUMES	2	0	1	4	0	5	5	31	0	1	68	3	120
APPROACH %	67%	0%	33%	44%	0%	56%	14%	86%	0%	1%	94%	4%	
APP/DEPART	3	/	8	9	/	1	36	/	36	72	/	75	0
BEGIN PEAK HR		5:00 PM											
VOLUMES	0	0	0	1	0	4	1	15	0	1	47	1	70
APPROACH %	0%	0%	0%	20%	0%	80%	6%	94%	0%	2%	96%	2%	
PEAK HR FACTOR		0.000			0.625			0.571			0.721		0.761
APP/DEPART	0	/	2	5	/	1	16	/	16	49	/	51	0

Valle Vista

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Valle Vista

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

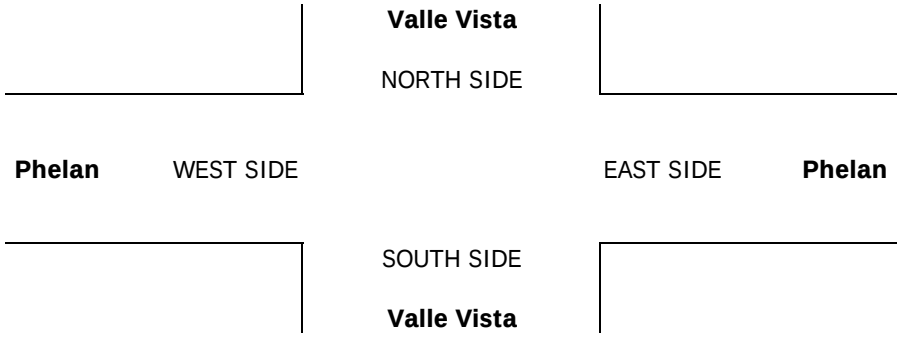
DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Valle Vista	LOCATION #:	4
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 3:	NOTES:
3-AXLE TRUCKS	

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

	NORTHBOUND Valle Vista			SOUTHBOUND Valle Vista			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	3	0	0	6	0	9
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	1	0	3	0	0	6	0	10
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
8:45 AM	0	0	0	0	0	0	0	2	0	0	1	0	3
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	1	0	13	0	0	17	0	31
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%	0%	
APP/DEPART	0	/	0	1	/	0	13	/	13	17	/	18	0
BEGIN PEAK HR		7:15 AM											
VOLUMES	0	0	0	0	0	1	0	9	0	0	12	0	22
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%	0%	
PEAK HR FACTOR		0.000			0.250			0.750			0.500		0.550
APP/DEPART	0	/	0	1	/	0	9	/	9	12	/	13	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	1	1	0	0	1	0	4
4:45 PM	0	0	0	1	0	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	1	0	0	5	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
VOLUMES	1	0	0	1	0	0	1	3	0	0	10	0	16
APPROACH %	100%	0%	0%	100%	0%	0%	25%	75%	0%	0%	100%	0%	
APP/DEPART	1	/	1	1	/	0	4	/	4	10	/	11	0
BEGIN PEAK HR		4:30 PM											
VOLUMES	1	0	0	1	0	0	1	2	0	0	7	0	12
APPROACH %	100%	0%	0%	100%	0%	0%	33%	67%	0%	0%	100%	0%	
PEAK HR FACTOR		0.250			0.250			0.375			0.350		0.500
APP/DEPART	1	/	1	1	/	0	3	/	3	7	/	8	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Valle Vista	LOCATION #:	4
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Valle Vista			SOUTHBOUND Valle Vista			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:45 AM	0	0	0	0	0	1	0	1	0	0	1	0	3
	8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:15 AM	0	0	0	0	0	0	0	2	0	0	2	1	5
	8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	1	1	3	0	0	5	1	11
	APPROACH %	0%	0%	0%	0%	0%	100%	25%	75%	0%	0%	83%	17%	
	APP/DEPART	0	/	2	1	/	0	4	/	3	6	/	6	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	0	0	0	1	1	3	0	0	4	1	10
	APPROACH %	0%	0%	0%	0%	0%	100%	25%	75%	0%	0%	80%	20%	
	PEAK HR FACTOR		0.000			0.250			0.500			0.417		0.500
	APP/DEPART	0	/	2	1	/	0	4	/	3	5	/	5	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	4
	VOLUMES	0	0	0	0	0	0	0	6	0	0	4	0	10
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	6	/	6	4	/	4	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	0	0	0	0	0	0	4	0	0	2	0	6
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.250			0.500		0.375
	APP/DEPART	0	/	0	0	/	0	4	/	4	2	/	2	0

Valle Vista

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Valle Vista

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Valle Vista	LOCATION #:	4
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Valle Vista			SOUTHBOUND Valle Vista			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		9:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		5:45 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

Valle Vista

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Valle Vista

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Valle Vista	LOCATION #:	4
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way-N/S

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Valle Vista			SOUTHBOUND Valle Vista			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	7:45 AM	0	0	0	0	0	0	0	4	0	0	2	0	6
	8:00 AM	0	0	0	0	0	0	0	4	0	0	3	0	7
	8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	1	11	0	0	7	0	19
	APPROACH %	0%	0%	0%	0%	0%	0%	8%	92%	0%	0%	100%	0%	
	APP/DEPART	0	/	1	0	/	0	12	/	11	7	/	7	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	0	0	0	0	0	0	10	0	0	6	0	16
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.625			0.500		0.571
	APP/DEPART	0	/	0	0	/	0	10	/	10	6	/	6	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	3
	4:15 PM	0	0	0	0	0	0	0	2	0	0	2	0	4
	4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	7	0	0	5	0	12
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	7	/	7	5	/	5	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	0	0	0	0	6	0	0	4	0	10
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.750			0.500		0.625
	APP/DEPART	0	/	0	0	/	0	6	/	6	4	/	4	0

Valle Vista

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Valle Vista

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:					
12/9/14	LOCATION:	Phelan	PROJECT #:	SC0492	
TUESDAY	NORTH & SOUTH:	Johnson	LOCATION #:	5	
	EAST & WEST:	Phelan	CONTROL:	SIGNAL	

CLASS 1:	NOTES:	AM		▲ N	
PASSENGER VEHICLES		PM	◄ W		E ►
		MD		S ▼	
		OTHER			
		OTHER			

	NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
AM													
7:00 AM	2	10	35	7	5	8	6	50	0	18	51	3	195
7:15 AM	1	2	31	8	5	3	4	54	2	16	70	6	202
7:30 AM	0	3	42	19	4	14	2	60	1	18	83	5	251
7:45 AM	4	2	50	25	16	33	9	88	2	35	87	9	360
8:00 AM	4	5	37	5	3	22	9	70	1	21	105	10	292
8:15 AM	1	3	40	9	9	8	4	67	2	19	71	6	239
8:30 AM	2	7	25	10	9	15	9	62	0	22	65	2	228
8:45 AM	6	9	29	1	15	11	7	63	1	29	85	7	263
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	20	41	289	84	66	114	50	514	9	178	617	48	2,030
APPROACH %	6%	12%	83%	32%	25%	43%	9%	90%	2%	21%	73%	6%	
APP/DEPART	350	/	139	264	/	253	573	/	887	843	/	751	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	9	13	169	58	32	77	24	285	6	93	346	30	1,142
APPROACH %	5%	7%	88%	35%	19%	46%	8%	90%	2%	20%	74%	6%	
PEAK HR FACTOR		0.853			0.564			0.795			0.862		0.793
APP/DEPART	191	/	67	167	/	131	315	/	512	469	/	432	0
PM													
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4	9	45	7	10	8	18	98	3	24	94	14	334
4:15 PM	3	4	42	13	6	10	14	111	3	16	114	14	350
4:30 PM	4	12	50	11	10	16	27	101	4	18	97	12	362
4:45 PM	4	15	41	8	4	9	27	122	2	21	90	5	348
5:00 PM	1	5	25	6	4	9	19	118	2	22	98	8	317
5:15 PM	3	7	24	5	6	14	19	117	4	16	92	8	315
5:30 PM	0	3	20	8	3	12	18	103	2	13	84	13	279
5:45 PM	2	6	11	7	5	16	7	64	2	11	79	8	218
VOLUMES	21	61	258	65	48	94	149	834	22	141	748	82	2,523
APPROACH %	6%	18%	76%	31%	23%	45%	15%	83%	2%	15%	77%	8%	
APP/DEPART	340	/	292	207	/	211	1,005	/	1,157	971	/	863	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	15	40	178	39	30	43	86	432	12	79	395	45	1,394
APPROACH %	6%	17%	76%	35%	27%	38%	16%	82%	2%	15%	76%	9%	
PEAK HR FACTOR		0.883			0.757			0.877			0.901		0.963
APP/DEPART	233	/	171	112	/	121	530	/	649	519	/	453	0

Johnson

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Johnson

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Johnson	LOCATION #:	5
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM PM MD OTHER OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	0	1	0	1	1	1	3	0	0	1	0	8
	7:15 AM	0	0	1	0	0	0	0	1	0	1	4	0	7
	7:30 AM	0	0	3	0	0	1	1	4	0	1	5	0	15
	7:45 AM	0	1	0	0	0	2	0	2	0	1	4	0	10
	8:00 AM	0	0	0	0	0	2	1	1	1	0	3	0	8
	8:15 AM	0	0	2	0	1	0	1	2	0	1	0	0	7
	8:30 AM	0	0	0	1	0	0	1	4	0	1	5	2	14
	8:45 AM	0	0	1	1	0	3	1	4	0	0	5	0	15
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1	8	2	2	9	6	21	1	5	27	2	84
	APPROACH %	0%	11%	89%	15%	15%	69%	21%	75%	4%	15%	79%	6%	
	APP/DEPART	9	/	9	13	/	8	28	/	31	34	/	36	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	0	3	2	1	5	4	11	1	2	13	2	44
	APPROACH %	0%	0%	100%	25%	13%	63%	25%	69%	6%	12%	76%	12%	
	PEAK HR FACTOR		0.375			0.500			0.800			0.531		0.733
	APP/DEPART	3	/	6	8	/	4	16	/	16	17	/	18	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	1	2	1	1	0	0	1	5	0	1	8	1	21
	4:15 PM	1	1	0	1	0	1	3	5	0	0	4	1	17
	4:30 PM	0	1	1	0	0	0	2	3	0	2	5	0	14
	4:45 PM	0	1	1	1	0	1	2	5	0	0	7	2	20
	5:00 PM	0	0	0	0	0	1	1	5	0	0	6	0	13
	5:15 PM	0	0	2	0	0	1	0	3	0	0	4	0	10
	5:30 PM	0	0	2	0	1	0	1	3	0	0	4	2	13
	5:45 PM	0	1	1	0	0	0	1	3	0	0	4	2	12
	VOLUMES	2	6	8	3	1	4	11	32	0	3	42	8	120
	APPROACH %	13%	38%	50%	38%	13%	50%	26%	74%	0%	6%	79%	15%	
	APP/DEPART	16	/	25	8	/	4	43	/	43	53	/	48	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	2	5	3	3	0	2	8	18	0	3	24	4	72
	APPROACH %	20%	50%	30%	60%	0%	40%	31%	69%	0%	10%	77%	13%	
	PEAK HR FACTOR		0.625			0.625			0.813			0.775		0.857
	APP/DEPART	10	/	17	5	/	3	26	/	24	31	/	28	0

Johnson

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Johnson

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Johnson	LOCATION #:	5
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 3:	NOTES:
3-AXLE TRUCKS	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	2	0	0	0	1	4
7:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	2	0	0	0	0	1	0	1	1	0	5
8:30 AM	0	0	1	0	0	0	1	0	0	0	1	0	3
8:45 AM	0	0	0	0	0	0	0	2	0	0	2	1	5
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	4	0	0	0	1	8	0	1	5	2	21
APPROACH %	0%	0%	100%	0%	0%	0%	11%	89%	0%	13%	63%	25%	
APP/DEPART	4	/	3	0	/	1	9	/	12	8	/	5	0
BEGIN PEAK HR		8:00 AM											
VOLUMES	0	0	3	0	0	0	1	4	0	1	4	1	14
APPROACH %	0%	0%	100%	0%	0%	0%	20%	80%	0%	17%	67%	17%	
PEAK HR FACTOR		0.375			0.000			0.625			0.500		0.700
APP/DEPART	3	/	2	0	/	1	5	/	7	6	/	4	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	1	2
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
VOLUMES	0	0	0	1	0	0	0	8	0	0	3	3	15
APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	50%	50%	
APP/DEPART	0	/	3	1	/	0	8	/	9	6	/	3	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	0	0	0	0	0	0	0	4	0	0	2	3	9
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	40%	60%	
PEAK HR FACTOR		0.000			0.000			1.000			0.625		0.750
APP/DEPART	0	/	3	0	/	0	4	/	4	5	/	2	0

Johnson

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Johnson

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Johnson	LOCATION #:	5
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	2	1	0	0	1	0	4
	7:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
	7:30 AM	0	0	0	0	0	0	1	3	0	0	5	0	9
	7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	1	0	0	6	0	7
	8:15 AM	0	0	1	0	0	0	0	1	0	0	2	0	4
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	1	0	0	0	3	10	0	0	14	1	29
	APPROACH %	0%	0%	100%	0%	0%	0%	23%	77%	0%	0%	93%	7%	
	APP/DEPART	1	/	4	0	/	0	13	/	11	15	/	14	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	0	1	0	0	0	1	7	0	0	13	0	22
	APPROACH %	0%	0%	100%	0%	0%	0%	13%	88%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.250			0.000			0.500			0.542		0.611
	APP/DEPART	1	/	1	0	/	0	8	/	8	13	/	13	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	1	0	0	0	0	0	0	2	0	3
	4:45 PM	0	0	0	1	0	0	0	2	0	0	0	0	3
	5:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	3
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	4
	VOLUMES	0	0	0	2	0	0	0	7	0	0	5	0	14
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	2	/	0	7	/	9	5	/	5	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	2	0	0	0	3	0	0	5	0	10
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.500			0.375			0.625		0.833
	APP/DEPART	0	/	0	2	/	0	3	/	5	5	/	5	0

Johnson

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Johnson

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Johnson	LOCATION #:	5
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		9:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
	BEGIN PEAK HR		5:45 PM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0

Johnson

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Johnson

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Johnson	LOCATION #:	5
TUESDAY	EAST & WEST:	Phelan	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Johnson			SOUTHBOUND Johnson			EASTBOUND Phelan			WESTBOUND Phelan			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	1	1	2	1	1	2	0	
AM													
7:00 AM	0	0	2	1	0	0	1	0	0	1	0	1	6
7:15 AM	0	0	2	0	0	0	0	0	0	0	0	1	3
7:30 AM	0	0	1	0	1	0	1	0	0	2	1	0	6
7:45 AM	0	0	2	0	0	0	0	3	0	1	2	0	8
8:00 AM	0	0	0	1	0	0	1	5	0	0	3	1	11
8:15 AM	0	0	0	0	1	0	0	1	0	1	1	0	4
8:30 AM	0	0	6	0	1	0	0	0	0	0	0	0	7
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	15	2	3	0	3	9	0	5	7	3	47
APPROACH %	0%	0%	100%	40%	60%	0%	25%	75%	0%	33%	47%	20%	
APP/DEPART	15	/	6	5	/	8	12	/	26	15	/	7	0
BEGIN PEAK HR		7:45 AM											
VOLUMES	0	0	8	1	2	0	1	9	0	2	6	1	30
APPROACH %	0%	0%	100%	33%	67%	0%	10%	90%	0%	22%	67%	11%	
PEAK HR FACTOR		0.333			0.750			0.417			0.563		0.682
APP/DEPART	8	/	2	3	/	4	10	/	18	9	/	6	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	1	1	0	0	0	1	0	0	1	1	6
4:15 PM	0	0	1	2	0	0	0	2	0	0	1	0	6
4:30 PM	0	0	2	1	0	0	0	1	0	0	0	0	4
4:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	1	5	4	0	0	0	7	0	0	3	2	22
APPROACH %	0%	17%	83%	100%	0%	0%	0%	100%	0%	0%	60%	40%	
APP/DEPART	6	/	3	4	/	0	7	/	16	5	/	3	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	0	1	5	4	0	0	0	6	0	0	2	1	19
APPROACH %	0%	17%	83%	100%	0%	0%	0%	100%	0%	0%	67%	33%	
PEAK HR FACTOR		0.750			0.500			0.750			0.375		0.792
APP/DEPART	6	/	2	4	/	0	6	/	15	3	/	2	0

Johnson

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Johnson

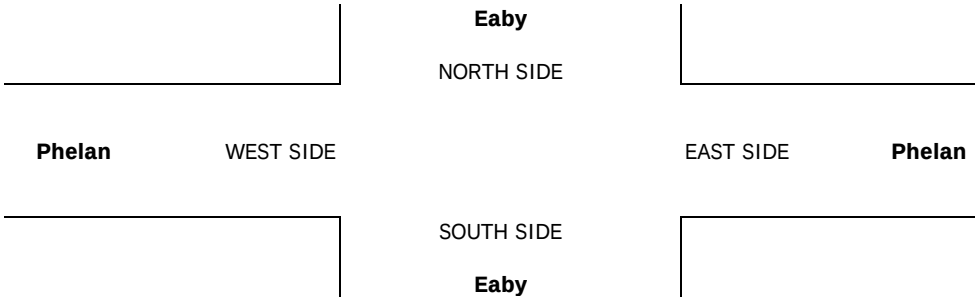
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:					
12/9/14	LOCATION:	Phelan	PROJECT #:	SC0492	
TUESDAY	NORTH & SOUTH:	Eaby	LOCATION #:	6	
	EAST & WEST:	Phelan	CONTROL:	Stop 2way- N/S	

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◄ W E ► S ▼

		NORTHBOUND Eaby			SOUTHBOUND Eaby			EASTBOUND Phelan			WESTBOUND Phelan			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	1	0	0	1	0	1	1	1	1	1	1	
AM	7:00 AM	7	0	4	0	1	2	2	111	3	0	54	0	184
	7:15 AM	5	0	7	0	0	0	2	85	1	0	77	0	177
	7:30 AM	7	0	9	1	0	1	1	116	3	2	135	0	275
	7:45 AM	9	1	12	1	0	0	0	169	2	6	127	2	329
	8:00 AM	7	1	2	3	1	5	1	107	4	5	127	1	264
	8:15 AM	2	0	6	1	0	0	2	117	7	2	94	2	233
	8:30 AM	4	0	6	0	0	0	1	88	6	5	80	2	192
	8:45 AM	12	0	5	0	0	2	1	76	1	1	106	1	205
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	53	2	51	6	2	10	10	869	27	21	800	8	1,859
	APPROACH %	50%	2%	48%	33%	11%	56%	1%	96%	3%	3%	97%	1%	
	APP/DEPART	106	/	20	18	/	50	906	/	926	829	/	863	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	25	2	29	6	1	6	4	509	16	15	483	5	1,101
	APPROACH %	45%	4%	52%	46%	8%	46%	1%	96%	3%	3%	96%	1%	
	PEAK HR FACTOR		0.636			0.361			0.773			0.918		0.837
	APP/DEPART	56	/	11	13	/	32	529	/	544	503	/	514	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	7	0	4	4	0	3	4	131	15	9	141	1	319
	4:15 PM	6	0	3	1	0	0	0	152	11	11	134	0	318
	4:30 PM	6	0	3	0	0	2	3	160	15	4	128	2	323
	4:45 PM	7	0	5	0	0	1	3	146	9	9	134	1	315
	5:00 PM	8	1	5	1	0	0	2	129	11	7	130	0	294
	5:15 PM	3	0	5	0	1	0	1	132	10	8	123	1	284
	5:30 PM	1	0	0	1	0	0	0	122	4	15	105	0	248
	5:45 PM	7	0	2	0	0	0	1	94	8	3	103	0	218
	VOLUMES	45	1	27	7	1	6	14	1,066	83	66	998	5	2,319
	APPROACH %	62%	1%	37%	50%	7%	43%	1%	92%	7%	6%	93%	0%	
	APP/DEPART	73	/	20	14	/	150	1,163	/	1,100	1,069	/	1,049	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	26	0	15	5	0	6	10	589	50	33	537	4	1,275
	APPROACH %	63%	0%	37%	45%	0%	55%	2%	91%	8%	6%	94%	1%	
	PEAK HR FACTOR		0.854			0.393			0.912			0.950		0.987
	APP/DEPART	41	/	14	11	/	83	649	/	609	574	/	569	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Eaby	LOCATION #:	6
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way- N/S

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM PM MD OTHER OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND Eaby			SOUTHBOUND Eaby			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	1	0	0	0	0	5	0	1	4	0	11
	7:15 AM	0	0	0	0	0	0	0	4	0	1	10	0	15
	7:30 AM	0	0	1	0	0	0	0	7	0	0	2	0	10
	7:45 AM	0	0	0	0	0	0	0	5	0	0	4	0	9
	8:00 AM	0	0	0	0	0	0	0	3	0	1	5	1	10
	8:15 AM	0	0	0	0	0	0	0	8	0	0	11	1	20
	8:30 AM	0	0	0	0	0	0	0	11	1	1	8	0	21
	8:45 AM	3	0	1	0	0	0	0	11	0	1	10	0	26
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	3	0	3	0	0	0	0	54	1	5	54	2	122
	APPROACH %	50%	0%	50%	0%	0%	0%	0%	98%	2%	8%	89%	3%	
	APP/DEPART	6	/	2	0	/	6	55	/	57	61	/	57	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	3	0	1	0	0	0	0	33	1	3	34	2	77
	APPROACH %	75%	0%	25%	0%	0%	0%	0%	97%	3%	8%	87%	5%	
	PEAK HR FACTOR		0.250			0.000			0.708			0.813		0.740
	APP/DEPART	4	/	2	0	/	4	34	/	34	39	/	37	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	1	0	0	9	0	1	3	1	15
	4:15 PM	1	0	0	0	0	0	0	4	0	1	1	0	7
	4:30 PM	0	0	1	0	0	0	0	3	1	0	1	0	6
	4:45 PM	0	0	1	0	0	0	0	3	0	1	2	0	7
	5:00 PM	0	0	1	0	0	0	1	7	0	2	7	0	18
	5:15 PM	0	0	2	0	0	0	0	1	1	0	0	0	4
	5:30 PM	0	0	0	0	0	0	0	4	0	0	4	0	8
	5:45 PM	0	0	0	0	0	0	0	1	0	0	2	0	3
	VOLUMES	1	0	5	0	1	0	1	32	2	5	20	1	68
	APPROACH %	17%	0%	83%	0%	100%	0%	3%	91%	6%	19%	77%	4%	
	APP/DEPART	6	/	2	1	/	8	35	/	37	26	/	21	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	1	0	3	0	0	0	1	17	1	4	11	0	38
	APPROACH %	25%	0%	75%	0%	0%	0%	5%	89%	5%	27%	73%	0%	
	PEAK HR FACTOR		1.000			0.000			0.594			0.417		0.528
	APP/DEPART	4	/	1	0	/	5	19	/	20	15	/	12	0

Eaby

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Eaby

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Eaby	LOCATION #:	6
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way- N/S

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Eaby			SOUTHBOUND Eaby			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	7:15 AM	1	0	0	0	0	0	0	3	0	0	0	0	4
	7:30 AM	0	0	0	0	0	0	0	3	0	0	5	0	8
	7:45 AM	0	0	0	0	0	0	0	1	1	0	1	0	3
	8:00 AM	0	0	0	0	0	0	0	2	0	0	4	0	6
	8:15 AM	0	0	0	0	0	0	0	3	0	0	4	0	7
	8:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	8:45 AM	0	0	1	0	0	0	0	1	0	0	1	0	3
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	1	0	1	0	0	0	0	15	1	0	16	0	34
	APPROACH %	50%	0%	50%	0%	0%	0%	0%	94%	6%	0%	100%	0%	
	APP/DEPART	2	/	0	0	/	1	16	/	16	16	/	17	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	0	0	0	0	0	0	9	1	0	14	0	24
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	90%	10%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.833			0.700		0.750
	APP/DEPART	0	/	0	0	/	1	10	/	9	14	/	14	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:15 PM	0	0	0	0	0	1	0	2	0	0	2	0	5
	4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	4:45 PM	0	0	0	0	0	0	0	3	0	0	1	0	4
	5:00 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
	5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	VOLUMES	0	0	0	0	0	1	0	7	0	0	9	1	18
	APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	90%	10%	
	APP/DEPART	0	/	1	1	/	0	7	/	7	10	/	10	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	0	0	1	0	6	0	0	6	1	14
	APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	86%	14%	
	PEAK HR FACTOR		0.000			0.250			0.500			0.875		0.700
	APP/DEPART	0	/	1	1	/	0	6	/	6	7	/	7	0

Eaby

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Eaby

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Eaby	LOCATION #:	6
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way- N/S

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Eaby			SOUTHBOUND Eaby			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	6	0	0	3	0	9
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	6	/	6	3	/	3	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	0	0	0	0	4	0	0	2	0	6
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.500			0.500		0.750
	APP/DEPART	0	/	0	0	/	0	4	/	4	2	/	2	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
	4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
	4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
	5:45 PM	0	0	0	0	0	0	0	5	0	0	0	0	5
	VOLUMES	0	0	0	0	0	0	0	11	0	0	4	0	15
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	11	/	11	4	/	4	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	0	0	0	0	0	0	7	0	0	2	0	9
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.350			0.500		0.450
	APP/DEPART	0	/	0	0	/	0	7	/	7	2	/	2	0

Eaby

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Eaby

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Eaby	LOCATION #:	6
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way- N/S

CLASS 5:	NOTES:
RV	

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

	NORTHBOUND Eaby			SOUTHBOUND Eaby			EASTBOUND Phelan			WESTBOUND Phelan			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM													
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR		9:45 AM											
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
PM													
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	
APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0
BEGIN PEAK HR		4:00 PM											
VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	
PEAK HR FACTOR		0.000			0.000			0.250			0.000		0.250
APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0

Eaby

NORTH SIDE

Phelan WEST SIDE EAST SIDE **Phelan**

SOUTH SIDE

Eaby

INTERSECTION TURNING MOVEMENT COUNTS

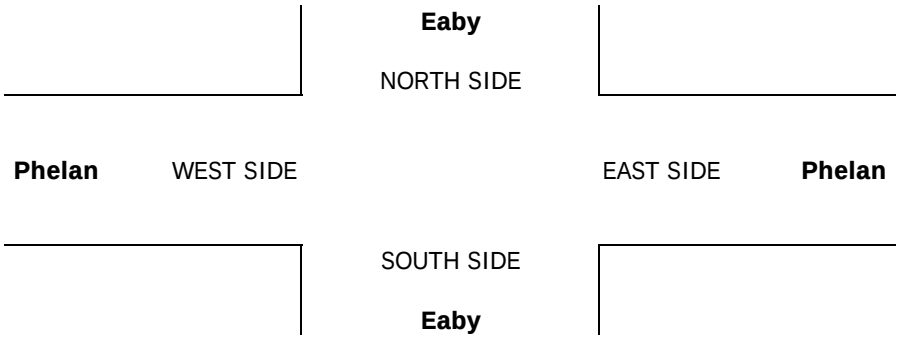
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Phelan	PROJECT #:	SC0492
12/9/14	NORTH & SOUTH:	Eaby	LOCATION #:	6
TUESDAY	EAST & WEST:	Phelan	CONTROL:	Stop 2way- N/S

CLASS 6:	NOTES:
BUSES	

AM PM MD OTHER OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Eaby			SOUTHBOUND Eaby			EASTBOUND Phelan			WESTBOUND Phelan			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	4	0	0	2	0	6
	7:15 AM	0	0	0	0	0	0	0	2	0	0	1	0	3
	7:30 AM	0	0	0	0	0	0	0	2	0	0	4	0	6
	7:45 AM	0	0	0	0	0	0	0	4	0	0	2	0	6
	8:00 AM	0	0	1	0	0	0	0	3	1	0	3	0	8
	8:15 AM	0	0	0	0	0	0	0	1	0	0	2	0	3
	8:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	4
	8:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	4
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	1	0	0	0	0	24	1	0	14	0	40
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	96%	4%	0%	100%	0%	
	APP/DEPART	1	/	0	0	/	1	25	/	25	14	/	14	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	0	1	0	0	0	0	10	1	0	11	0	23
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	91%	9%	0%	100%	0%	
	PEAK HR FACTOR		0.250			0.000			0.688			0.688		0.719
	APP/DEPART	1	/	0	0	/	1	11	/	11	11	/	11	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	3	0	0	3	0	6
	4:15 PM	0	0	0	0	0	0	0	6	0	0	0	0	6
	4:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	4
	4:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	16	0	0	4	0	20
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	APP/DEPART	0	/	0	0	/	0	16	/	16	4	/	4	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	0	0	0	0	0	16	0	0	3	0	19
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
	PEAK HR FACTOR		0.000			0.000			0.667			0.250		0.792
	APP/DEPART	0	/	0	0	/	0	16	/	16	3	/	3	0



APPENDIX D

Future Growth Increment Calculation Worksheets

Opening Year (2017)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014					17	9				
					v	^				
			152	<	IN =		632	<	304	
			249	>	OUT =		632	>	274	
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
PCE FACTORS BY AXLE:				<	^	>				
2: **1.5** 3: **2.0** 4+: **3.0**				2	0	20				

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008					**374**	**166**				
					v	^				
			177	<	IN =		1173	<	**197**	
			327	>	OUT =		1173	>	**311**	
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008					**3**	**3**				
					v	^				
			7	<	IN =		22	<	**8**	
			7	>	OUT =		21	>	**7**	
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**					143	64				
PHF FOR TRUCKS: **0.333**					v	^				
			70	<	IN =		453	<	78	
			127	>	OUT =		453	>	121	
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035					**613**	**273**				
					v	^				
			263	<	IN =		1517	<	**288**	
			314	>	OUT =		1517	>	**312**	
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035					**7**	**5**				
					v	^				
			14	<	IN =		38	<	**15**	
			11	>	OUT =		38	>	**11**	
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38					235	105				
PHF FOR TRUCKS: 0.333					v	^				
			105	<	IN =		589	<	114	
			123	>	OUT =		589	>	122	
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: **2035**
FACTOR = **1.00**

						92	41			
						v	^			
			35	<				<	37	
			-4	>				>	2	
						v	^			
						58	11			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						90	40			
						v	^			
			40	<	IN =		170	<	40	
			30	>	OUT =		170	>	30	
						v	^			
						60	10			

FUTURE YEAR GROWTH: 2014 TO **2017**
3 YEARS

						10	0			
						v	^			
			0	<				<	0	
			0	>				>	0	
						v	^			
						10	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014					11	21				
					v	^				
			261	<	IN =		773	<	467	
			242	>	OUT =		773	>	262	
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
PCE FACTORS BY AXLE:				<	^	>				
2: 1.5 3: 2 4+: 3.0				0	0	3				

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008					**346**	**524**				
					v	^				
			490	<	IN =		2005	<	**500**	
			446	>	OUT =		2004	>	**450**	
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008					**5**	**5**				
					v	^				
			9	<	IN =		36	<	**9**	
			16	>	OUT =		36	>	**16**	
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**					98	148				
PHF FOR TRUCKS: **0.25**					v	^				
			139	<	IN =		570	<	142	
			129	>	OUT =		570	>	130	
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035					**537**	**783**				
					v	^				
			673	<	IN =		2578	<	**540**	
			509	>	OUT =		2578	>	**483**	
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035					**7**	**7**				
					v	^				
			23	<	IN =		64	<	**23**	
			25	>	OUT =		63	>	**25**	
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28					152	221				
PHF FOR TRUCKS: 0.25					v	^				
			194	<	IN =		738	<	157	
			149	>	OUT =		738	>	141	
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

						54	73			
						v	^			
			55	<				<	15	
			20	>				>	11	
						v	^			
						28	79			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						50	70			
						v	^			
			50	<	IN =		210	<	50	
			30	>	OUT =		180	>	30	
						v	^			
						30	80			

FUTURE YEAR GROWTH: 2014 TO 2017
3 YEARS

						10	10			
						v	^			
			10	<				<	10	
			0	>				>	0	
						v	^			
						0	10			

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**80**	BOUND	THRU	**5**	IN ...	**70**
	RIGHT	**65**	OUT ...	**250**		RIGHT	**37**	OUT ...	**270**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**30**	BOUND	THRU	**3**	IN ...	**20**
	RIGHT	**0**	OUT ...	**10**		RIGHT	**1**	OUT ...	**30**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**310**	BOUND	THRU	**264**	IN ...	**290**
	RIGHT	**30**	OUT ...	**220**		RIGHT	**21**	OUT ...	**310**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**410**	BOUND	THRU	**279**	IN ...	**540**
	RIGHT	**7**	OUT ...	**350**		RIGHT	**14**	OUT ...	**320**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**16**	NORTH LEG	NORTH	LEFT	**14**	**19**	NORTH LEG
BOUND	THRU	**3**	**3**	RATIO **7.2%**	BOUND	THRU	**5**	**9**	RATIO **8.3%**
	RIGHT	**65**	**65**	ADT 600		RIGHT	**37**	**43**	ADT 600
SOUTH	LEFT	**5**	**9**	SOUTH LEG	SOUTH	LEFT	**7**	**12**	SOUTH LEG
BOUND	THRU	**12**	**21**	RATIO **8.8%**	BOUND	THRU	**3**	**6**	RATIO **9.0%**
	RIGHT	**0**	**0**	ADT 3,800		RIGHT	**1**	**2**	ADT 3,800
EAST	LEFT	**3**	**3**	EAST LEG	EAST	LEFT	**2**	**3**	EAST LEG
BOUND	THRU	**277**	**279**	RATIO **7.8%**	BOUND	THRU	**264**	**265**	RATIO **8.8%**
	RIGHT	**30**	**30**	ADT 9,800		RIGHT	**21**	**24**	ADT 9,800
WEST	LEFT	**202**	**201**	WEST LEG	WEST	LEFT	**240**	**240**	WEST LEG
BOUND	THRU	**202**	**205**	RATIO **7.8%**	BOUND	THRU	**279**	**289**	RATIO **8.9%**
	RIGHT	**7**	**7**	ADT 6,800		RIGHT	**14**	**18**	ADT 6,800

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
		15	^					^		24
		245	>					<		249
		36	v					v		14
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
				297	<	IN	=	686	<	287
				296	>	OUT	=	686	>	292
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
		2	^					^		7
		54	>					<		158
		2	v					v		12
PCE FACTORS BY AXLE:					<	^	>			
2: **1.5** 3: **2.0** 4+: **3.0**					9	0	5			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
		17	^					^		31
		299	>					<		407
		38	v					v		26
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	0			
						v	^			
				197	<	IN	=	510	<	**197**
				311	>	OUT	=	511	>	**314**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	0			
						v	^			
				8	<	IN	=	17	<	**8**
				7	>	OUT	=	18	>	**10**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
				78	<	IN	=	199	<	78
				121	>	OUT	=	200	>	123
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	0			
						v	^			
				290	<	IN	=	646	<	**290**
				354	>	OUT	=	646	>	**356**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
				15	<	IN	=	27	<	**15**
				11	>	OUT	=	29	>	**14**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
				115	<	IN	=	254	<	115
				138	>	OUT	=	255	>	140
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						0	0			
						v	^			
				38	<			<		38
				18	>			>		17
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						0	10			
						v	^			
				50	<	IN	=	90	<	50
				40	>	OUT	=	100	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

						0	0			
						v	^			
				10	<			<		10
				0	>			>		0
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
		28	^					^		83
		224	>					<		404
		33	v					v		50
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
				506	<	IN	=	1083	<	537
				285	>	OUT	=	1083	>	323
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
		2	^					^		7
		33	>					<		46
		3	v					v		6
PCE FACTORS BY AXLE:					<	^	>			
2: 1.5 3: 2 4+: 3.0					14	3	6			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
		30	^					^		90
		257	>					<		450
		36	v					v		56
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	0			
						v	^			
				500	<	IN	=	952	<	**500**
				450	>	OUT	=	954	>	**454**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	0			
						v	^			
				9	<	IN	=	27	<	**9**
				16	>	OUT	=	29	>	**20**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
				142	<	IN	=	273	<	142
				130	>	OUT	=	274	>	132
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	0			
						v	^			
				616	<	IN	=	1138	<	**616**
				520	>	OUT	=	1140	>	**524**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	0			
						v	^			
				23	<	IN	=	51	<	**23**
				26	>	OUT	=	52	>	**29**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
				178	<	IN	=	331	<	178
				152	>	OUT	=	332	>	154
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						0	0			
						v	^			
				36	<			<		36
				22	>			>		22
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						10	10			
						v	^			
				60	<	IN	=	100	<	60
				30	>	OUT	=	110	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

						0	0			
						v	^			
				10	<			<		10
				0	>			>		0
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**350**	BOUND	THRU	**257**	IN ...	**320**
	RIGHT	**38**	OUT ...	**470**		RIGHT	**36**	OUT ...	**580**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**480**	BOUND	THRU	**450**	IN ...	**610**
	RIGHT	**31**	OUT ...	**360**		RIGHT	**90**	OUT ...	**360**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**40**	NORTH LEG	NORTH	LEFT	**89**	**89**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.1%**	BOUND	THRU	**27**	**28**	RATIO **8.7%**
	RIGHT	**43**	**43**	ADT 2,800		RIGHT	**81**	**81**	ADT 2,800
SOUTH	LEFT	**14**	**14**	SOUTH LEG	SOUTH	LEFT	**26**	**26**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.0%**	BOUND	THRU	**38**	**38**	RATIO **8.4%**
	RIGHT	**17**	**17**	ADT 3,900		RIGHT	**29**	**29**	ADT 3,900
EAST	LEFT	**17**	**17**	EAST LEG	EAST	LEFT	**30**	**30**	EAST LEG
BOUND	THRU	**299**	**300**	RATIO **7.4%**	BOUND	THRU	**257**	**259**	RATIO **8.7%**
	RIGHT	**38**	**38**	ADT 11,200		RIGHT	**36**	**36**	ADT 11,200
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**56**	WEST LEG
BOUND	THRU	**407**	**418**	RATIO **8.1%**	BOUND	THRU	**450**	**461**	RATIO **8.8%**
	RIGHT	**31**	**31**	ADT 10,300		RIGHT	**90**	**92**	ADT 10,300

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				77	86	94		
				<	v	>		
		39	^				^	29
		214	>				<	300
		32	v				v	122
				<	^	>		
				52	92	101		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					257	160		
					v	^		
		429	<	IN	=	1238	<	451
		285	>	OUT	=	1238	>	409
					v	^		
					240	245		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				13	5	20		
				<	v	>		
		9	^				^	3
		56	>				<	68
		8	v				v	5
				<	^	>		
				15	20	18		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				90	91	114		
				<	v	>		
		48	^				^	32
		270	>				<	368
		40	v				v	127
				<	^	>		
				67	112	119		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					720	**305**		
					v	^		
		197	<	IN	=	2198	<	**793**
		314	>	OUT	=	2197	>	**502**
					v	^		
					1193	**371**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					7	**10**		
					v	^		
		8	<	IN	=	41	<	**13**
		10	>	OUT	=	40	>	**12**
					v	^		
					10	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					276	119		
					v	^		
		78	<	IN	=	849	<	306
		123	>	OUT	=	848	>	195
					v	^		
					457	145		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					674	**289**		
					v	^		
		290	<	IN	=	2869	<	**1412**
		356	>	OUT	=	2867	>	**586**
					v	^		
					1702	**427**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					11	**8**		
					v	^		
		15	<	IN	=	71	<	**35**
		14	>	OUT	=	69	>	**17**
					v	^		
					29	**11**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					260	112		
					v	^		
		115	<	IN	=	1114	<	548
		140	>	OUT	=	1112	>	228
					v	^		
					656	166		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					-16	-7		
					v	^		
		38	<			<		243
		17	>			>		34
					v	^		
					200	21		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	20		
					v	^		
		50	<	IN	=	330	<	240
		40	>	OUT	=	320	>	50
					v	^		
					200	20		

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

					0	0		
					v	^		
		10	<			<		30
		0	>			>		10
					v	^		
					20	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				95	87	111		
				<	v	>		
		83	^				^	45
		270	>				<	363
		36	v				v	99
				<	^	>		
				106	145	171		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					293	273		
					v	^		
		564	<	IN	=	1611	<	507
		389	>	OUT	=	1611	>	552
					v	^		
					222	422		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				12	4	7		
				<	v	>		
		2	^				^	10
		40	>				<	50
		0	v				v	9
				<	^	>		
				5	14	17		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				107	91	118		
				<	v	>		
		85	^				^	55
		310	>				<	413
		36	v				v	108
				<	^	>		
				111	159	188		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					588	**830**		
					v	^		
		500	<	IN	=	3381	<	**945**
		454	>	OUT	=	3378	>	**1212**
					v	^		
					836	**1394**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					12	**10**		
					v	^		
		9	<	IN	=	61	<	**18**
		20	>	OUT	=	58	>	**21**
					v	^		
					18	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					168	235		
					v	^		
		142	<	IN	=	962	<	269
		132	>	OUT	=	960	>	345
					v	^		
					239	393		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					541	**809**		
					v	^		
		616	<	IN	=	4205	<	**1204**
		524	>	OUT	=	4204	>	**1782**
					v	^		
					997	**1936**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					12	**16**		
					v	^		
		23	<	IN	=	113	<	**42**
		29	>	OUT	=	110	>	**43**
					v	^		
					28	**30**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					154	231		
					v	^		
		178	<	IN	=	1206	<	348
		154	>	OUT	=	1205	>	510
					v	^		
					286	550		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					-13	-4		
					v	^		
		36	<			<		79
		22	>			>		165
					v	^		
					48	157		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	30		
					v	^		
		60	<	IN	=	310	<	80
		40	>	OUT	=	310	>	170
					v	^		
					50	160		

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

					0	0		
					v	^		
		10	<			<		10
		0	>			>		20
					v	^		
					10	20		

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**300**	BOUND	THRU	**159**	IN ...	**480**
	RIGHT	**119**	OUT ...	**280**		RIGHT	**188**	OUT ...	**250**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**300**	BOUND	THRU	**91**	IN ...	**320**
	RIGHT	**90**	OUT ...	**190**		RIGHT	**107**	OUT ...	**300**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**360**	BOUND	THRU	**310**	IN ...	**430**
	RIGHT	**40**	OUT ...	**540**		RIGHT	**36**	OUT ...	**640**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**560**	BOUND	THRU	**413**	IN ...	**590**
	RIGHT	**32**	OUT ...	**510**		RIGHT	**55**	OUT ...	**640**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**68**	NORTH LEG	NORTH	LEFT	**111**	**115**	NORTH LEG
BOUND	THRU	**112**	**112**	RATIO **6.9%**	BOUND	THRU	**159**	**163**	RATIO **8.7%**
	RIGHT	**119**	**123**	ADT 7,200		RIGHT	**188**	**204**	ADT 7,200
SOUTH	LEFT	**114**	**116**	SOUTH LEG	SOUTH	LEFT	**118**	**122**	SOUTH LEG
BOUND	THRU	**91**	**96**	RATIO **7.1%**	BOUND	THRU	**91**	**95**	RATIO **8.9%**
	RIGHT	**90**	**90**	ADT 8,200		RIGHT	**107**	**108**	ADT 8,200
EAST	LEFT	**48**	**49**	EAST LEG	EAST	LEFT	**85**	**86**	EAST LEG
BOUND	THRU	**270**	**272**	RATIO **7.7%**	BOUND	THRU	**310**	**314**	RATIO **8.8%**
	RIGHT	**40**	**42**	ADT 14,000		RIGHT	**36**	**37**	ADT 14,000
WEST	LEFT	**127**	**142**	WEST LEG	WEST	LEFT	**108**	**118**	WEST LEG
BOUND	THRU	**368**	**385**	RATIO **7.3%**	BOUND	THRU	**413**	**420**	RATIO **8.7%**
	RIGHT	**32**	**33**	ADT 12,400		RIGHT	**55**	**55**	ADT 12,400

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				58	168	13		
				<	v	>		
		21	^				^	21
		39	>				<	87
		22	v				v	71
				<	^	>		
				58	268	125		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					239	310		
					v	^		
		203	<	IN	=	951	<	179
		82	>	OUT	=	951	>	177
					v	^		
					261	451		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				6	11	4		
				<	v	>		
		11	^				^	3
		7	>				<	5
		5	v				v	9
				<	^	>		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

					7	25	24	

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				64	179	17		
				<	v	>		
		32	^				^	24
		46	>				<	92
		27	v				v	80
				<	^	>		
				65	293	149		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					1193	**371**		
					v	^		
		694	<	IN	=	1564	<	**0**
		76	>	OUT	=	1564	>	**0**
					v	^		
					499	**295**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					10	**11**		
					v	^		
		0	<	IN	=	20	<	**0**
		0	>	OUT	=	21	>	**0**
					v	^		
					10	**10**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					457	145		
					v	^		
		264	<	IN	=	601	<	0
		29	>	OUT	=	601	>	0
					v	^		
					193	115		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					1702	**427**		
					v	^		
		754	<	IN	=	2129	<	**0**
		97	>	OUT	=	2129	>	**0**
					v	^		
					948	**330**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					29	**11**		
					v	^		
		1	<	IN	=	40	<	**0**
		1	>	OUT	=	40	>	**0**
					v	^		
					28	**10**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					656	166		
					v	^		
		287	<	IN	=	822	<	0
		37	>	OUT	=	822	>	0
					v	^		
					370	129		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					200	21		
					v	^		
		23	<			<		0
		8	>			>		0
					v	^		
					177	13		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					200	30		
					v	^		
		20	<	IN	=	240	<	20
		10	>	OUT	=	250	>	20
					v	^		
					180	10		

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

					20	0		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					20	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				90	92	14		
				<	v	>		
		28	^				^	30
		35	>				<	50
		19	v				v	51
				<	^	>		
				54	359	193		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					196	417		
					v	^		
		194	<	IN	=	1015	<	131
		82	>	OUT	=	1015	>	242
					v	^		
					162	606		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				5	5	2		
				<	v	>		
		0	^				^	3
		2	>				<	2
		0	v				v	0
				<	^	>		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

					2	46	30	

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				95	97	16		
				<	v	>		
		28	^				^	33
		37	>				<	52
		19	v				v	51
				<	^	>		
				56	405	223		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					836	**1394**		
					v	^		
		178	<	IN	=	2229	<	**0**
		677	>	OUT	=	2230	>	**0**
					v	^		
					658	**716**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					18	**11**		
					v	^		
		1	<	IN	=	30	<	**0**
		1	>	OUT	=	29	>	**0**
					v	^		
					17	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					239	393		
					v	^		
		50	<	IN	=	632	<	0
		190	>	OUT	=	632	>	0
					v	^		
					188	203		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					997	**1936**		
					v	^		
		212	<	IN	=	2933	<	**0**
		745	>	OUT	=	2933	>	**0**
					v	^		
					785	**1191**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					28	**30**		
					v	^		
		1	<	IN	=	58	<	**0**
		1	>	OUT	=	58	>	**0**
					v	^		
					27	**29**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					286	550		
					v	^		
		60	<	IN	=	836	<	0
		209	>	OUT	=	836	>	0
					v	^		
					227	341		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					48	157		
					v	^		
		10	<			<		0
		19	>			>		0
					v	^		
					38	138		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	160		
					v	^		
		20	<	IN	=	220	<	10
		20	>	OUT	=	250	>	30
					v	^		
					40	140		

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

					10	20		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					0	20		

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**700**
	RIGHT	**149**	OUT ...	**310**		RIGHT	**223**	OUT ...	**170**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**280**	BOUND	THRU	**97**	IN ...	**220**
	RIGHT	**64**	OUT ...	**350**		RIGHT	**95**	OUT ...	**490**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**80**
	RIGHT	**27**	OUT ...	**220**		RIGHT	**19**	OUT ...	**200**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**200**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**210**		RIGHT	**33**	OUT ...	**280**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**65**	NORTH LEG	NORTH	LEFT	**56**	**56**	NORTH LEG
BOUND	THRU	**293**	**294**	RATIO **7.9%**	BOUND	THRU	**405**	**424**	RATIO **8.9%**
	RIGHT	**149**	**150**	ADT 8,000		RIGHT	**223**	**226**	ADT 8,000
SOUTH	LEFT	**17**	**17**	SOUTH LEG	SOUTH	LEFT	**16**	**19**	SOUTH LEG
BOUND	THRU	**179**	**196**	RATIO **8.2%**	BOUND	THRU	**97**	**102**	RATIO **8.8%**
	RIGHT	**64**	**65**	ADT 10,000		RIGHT	**95**	**99**	ADT 10,000
EAST	LEFT	**32**	**33**	EAST LEG	EAST	LEFT	**28**	**28**	EAST LEG
BOUND	THRU	**46**	**46**	RATIO **8.6%**	BOUND	THRU	**37**	**37**	RATIO **8.8%**
	RIGHT	**27**	**30**	ADT 4,800		RIGHT	**19**	**19**	ADT 4,800
WEST	LEFT	**80**	**85**	WEST LEG	WEST	LEFT	**51**	**51**	WEST LEG
BOUND	THRU	**92**	**92**	RATIO **10.0%**	BOUND	THRU	**52**	**52**	RATIO **8.8%**
	RIGHT	**24**	**24**	ADT 3,300		RIGHT	**33**	**38**	ADT 3,300

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		402	>				<	575
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1		
					v	^		
		578	<	IN =	1001	<	586	
		404	>	OUT =	1001	>	410	
					v	^		
					12	9		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		64	>				<	52
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		466	>				<	627
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		793	<	IN =	1295	<	**793**	
		502	>	OUT =	1295	>	**502**	
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		13	<	IN =	25	<	**13**	
		12	>	OUT =	25	>	**12**	
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		306	<	IN =	500	<	306	
		195	>	OUT =	500	>	195	
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1412	<	IN =	1998	<	**1412**	
		586	>	OUT =	1998	>	**586**	
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		35	<	IN =	52	<	**35**	
		17	>	OUT =	52	>	**17**	
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		548	<	IN =	777	<	548	
		228	>	OUT =	777	>	228	
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0		
					v	^		
		243	<			<	243	
		34	>			>	34	
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		240	<	IN =	290	<	240	
		50	>	OUT =	290	>	50	
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO **2017**

1 YEARS

					0	0		
					v	^		
		10	<			<	10	
		0	>			>	0	
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		637	>				<	524
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5		
					v	^		
		536	<	IN =	1206	<	540	
		642	>	OUT =	1206	>	649	
					v	^		
					16	17		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		61	>				<	24
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		698	>				<	548
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		945	<	IN =	2157	<	**945**	
		1212	>	OUT =	2157	>	**1212**	
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		18	<	IN =	39	<	**18**	
		21	>	OUT =	39	>	**21**	
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		269	<	IN =	614	<	269	
		345	>	OUT =	614	>	345	
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1204	<	IN =	2986	<	**1204**	
		1782	>	OUT =	2986	>	**1782**	
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		42	<	IN =	85	<	**42**	
		43	>	OUT =	85	>	**43**	
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		348	<	IN =	857	<	348	
		510	>	OUT =	857	>	510	
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0		
					v	^		
		79	<			<	79	
		165	>			>	165	
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		80	<	IN =	250	<	80	
		170	>	OUT =	250	>	170	
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO 2017

1 YEARS

					0	0		
					v	^		
		0	<			<	0	
		10	>			>	10	
					v	^		
					0	0		

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**470**	BOUND	THRU	**698**	IN ...	**720**
	RIGHT	**2**	OUT ...	**650**		RIGHT	**2**	OUT ...	**560**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**650**	BOUND	THRU	**548**	IN ...	**560**
	RIGHT	**1**	OUT ...	**470**		RIGHT	**2**	OUT ...	**720**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**465**	RATIO **8.1%**	BOUND	THRU	**698**	**706**	RATIO **9.2%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**646**	RATIO **8.0%**	BOUND	THRU	**548**	**551**	RATIO **9.1%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

				0	0			
				v	^			
			30 <		<	30		
			0 >		>	0		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

				0	0			
				v	^			
			10 <		<	10		
			20 >		>	20		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**420**	BOUND	THRU	**621**	IN ...	**640**
	RIGHT	**0**	OUT ...	**570**		RIGHT	**0**	OUT ...	**580**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**570**	BOUND	THRU	**568**	IN ...	**580**
	RIGHT	**0**	OUT ...	**420**		RIGHT	**0**	OUT ...	**640**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**425**	RATIO **7.1%**	BOUND	THRU	**621**	**640**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,000		RIGHT	**0**	**0**	ADT 14,000
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**570**	RATIO **7.1%**	BOUND	THRU	**568**	**580**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,000		RIGHT	**0**	**0**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

				0	0			
				v	^			
			30 <		<	30		
			0 >		>	0		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

				0	0			
				v	^			
			10 <		<	10		
			20 >		>	20		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**420**	BOUND	THRU	**621**	IN ...	**640**
	RIGHT	**0**	OUT ...	**570**		RIGHT	**0**	OUT ...	**580**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**570**	BOUND	THRU	**568**	IN ...	**580**
	RIGHT	**0**	OUT ...	**420**		RIGHT	**0**	OUT ...	**640**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**425**	RATIO **7.1%**	BOUND	THRU	**621**	**640**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,000		RIGHT	**0**	**0**	ADT 14,000
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**570**	RATIO **7.1%**	BOUND	THRU	**568**	**580**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,000		RIGHT	**0**	**0**	ADT 14,000

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				14	2	9			
				<	v	>			
		19	^				^	11	
		324	>				<	400	
		16	v				v	11	
				<	^	>			
				5	1	18			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					25	31			
					v	^			
		419	<	IN	=	830	<	422	
		359	>	OUT	=	830	>	351	
					v	^			
					29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				8	0	2			
				<	v	>			
		0	^				^	3	
		63	>				<	116	
		2	v				v	0	
				<	^	>			
				2	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				22	2	11			
				<	v	>			
		19	^				^	14	
		387	>				<	516	
		18	v				v	11	
				<	^	>			
				7	1	18			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					53	**81**			
					v	^			
		793	<	IN	=	1721	<	**983**	
		502	>	OUT	=	1720	>	**669**	
					v	^			
					177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
		13	<	IN	=	28	<	**14**	
		12	>	OUT	=	28	>	**13**	
					v	^			
					2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					20	31			
					v	^			
		306	<	IN	=	663	<	378	
		195	>	OUT	=	663	>	259	
					v	^			
					68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					141	**129**			
					v	^			
		1412	<	IN	=	2632	<	**1678**	
		586	>	OUT	=	2632	>	**735**	
					v	^			
					356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					1	**1**			
					v	^			
		35	<	IN	=	60	<	**38**	
		17	>	OUT	=	60	>	**20**	
					v	^			
					4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					54	49			
					v	^			
		548	<	IN	=	1020	<	650	
		228	>	OUT	=	1020	>	286	
					v	^			
					137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					34	19			
					v	^			
		243	<				<	272	
		34	>				>	27	
					v	^			
					69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	20			
					v	^			
		240	<	IN	=	360	<	270	
		40	>	OUT	=	370	>	40	
					v	^			
					70	20			

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

					0	0			
					v	^			
		30	<				<	30	
		0	>				>	0	
					v	^			
					10	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				16	0	10			
				<	v	>			
		26	^				^	15	
		529	>				<	488	
		12	v				v	18	
				<	^	>			
				6	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					26	41			
					v	^			
		510	<	IN	=	1129	<	521	
		567	>	OUT	=	1129	>	548	
					v	^			
					30	15			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	0	7			
				<	v	>			
		8	^				^	3	
		46	>				<	52	
		0	v				v	0	
				<	^	>			
				5	0	2			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				18	0	17			
				<	v	>			
		34	^				^	18	
		575	>				<	540	
		12	v				v	18	
				<	^	>			
				11	0	11			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					125	**83**			
					v	^			
		945	<	IN	=	2793	<	**1206**	
		1212	>	OUT	=	2793	>	**1471**	
					v	^			
					294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
		18	<	IN	=	43	<	**20**	
		21	>	OUT	=	44	>	**24**	
					v	^			
					2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					35	23			
					v	^			
		269	<	IN	=	793	<	343	
		345	>	OUT	=	793	>	418	
					v	^			
					83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					232	**246**			
					v	^			
		1204	<	IN	=	4038	<	**1441**	
		1782	>	OUT	=	4038	>	**2154**	
					v	^			
					434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					2	**2**			
					v	^			
		42	<	IN	=	97	<	**46**	
		43	>	OUT	=	98	>	**48**	
					v	^			
					6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					65	69			
					v	^			
		348	<	IN	=	1155	<	415	
		510	>	OUT	=	1155	>	615	
					v	^			
					123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					30	46			
					v	^			
		79	<				<	72	
		165	>				>	197	
					v	^			
					40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	50			
					v	^			
		80	<	IN	=	360	<	70	
		170	>	OUT	=	370	>	200	
					v	^			
					40	90			

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

					0	10			
					v	^			
		10	<				<	10	
		20	>				>	20	
					v	^			
					0	10			

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**30**	BOUND	THRU	**0**	IN ...	**30**
	RIGHT	**18**	OUT ...	**40**		RIGHT	**11**	OUT ...	**30**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**40**	BOUND	THRU	**0**	IN ...	**40**
	RIGHT	**22**	OUT ...	**30**		RIGHT	**18**	OUT ...	**60**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**420**	BOUND	THRU	**575**	IN ...	**640**
	RIGHT	**18**	OUT ...	**580**		RIGHT	**12**	OUT ...	**580**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**580**	BOUND	THRU	**540**	IN ...	**590**
	RIGHT	**14**	OUT ...	**420**		RIGHT	**18**	OUT ...	**620**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**8**	NORTH LEG	NORTH	LEFT	**11**	**15**	NORTH LEG
BOUND	THRU	**1**	**1**	RATIO **6.7%**	BOUND	THRU	**0**	**0**	RATIO **9.1%**
	RIGHT	**18**	**22**	ADT 1,100		RIGHT	**11**	**15**	ADT 1,100
SOUTH	LEFT	**11**	**13**	SOUTH LEG	SOUTH	LEFT	**17**	**20**	SOUTH LEG
BOUND	THRU	**2**	**3**	RATIO **9.0%**	BOUND	THRU	**0**	**0**	RATIO **7.5%**
	RIGHT	**22**	**24**	ADT 800		RIGHT	**18**	**20**	ADT 800
EAST	LEFT	**19**	**19**	EAST LEG	EAST	LEFT	**34**	**39**	EAST LEG
BOUND	THRU	**387**	**387**	RATIO **7.2%**	BOUND	THRU	**575**	**585**	RATIO **8.7%**
	RIGHT	**18**	**22**	ADT 13,900		RIGHT	**12**	**12**	ADT 13,900
WEST	LEFT	**11**	**16**	WEST LEG	WEST	LEFT	**18**	**18**	WEST LEG
BOUND	THRU	**516**	**549**	RATIO **7.2%**	BOUND	THRU	**540**	**545**	RATIO **8.7%**
	RIGHT	**14**	**14**	ADT 14,000		RIGHT	**18**	**21**	ADT 14,000

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	24			
				v	^			
		0	<	IN =	53	<		0
		0	>	OUT =	53	>		0
				v	^			
				29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	2	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	2	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	31	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	26	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				177	**183**			
				v	^			
			<	IN =	360	<		
			>	OUT =	360	>		
				v	^			
				177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				68	70			
				v	^			
		0	<	IN =	138	<		0
		0	>	OUT =	138	>		0
				v	^			
				68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				356	**227**			
				v	^			
			<	IN =	583	<		
			>	OUT =	583	>		
				v	^			
				356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				4	**4**			
				v	^			
			<	IN =	8	<		
			>	OUT =	8	>		
				v	^			
				4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				137	88			
				v	^			
		0	<	IN =	224	<		0
		0	>	OUT =	224	>		0
				v	^			
				137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				69	17			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				70	20			
				v	^			
		0	<	IN =	90	<		0
		0	>	OUT =	90	>		0
				v	^			
				70	20			

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

				10	0			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				10	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	19	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	19			
				v	^			
		0	<	IN =	48	<		0
		0	>	OUT =	48	>		0
				v	^			
				29	19			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	5	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				294	**250**			
				v	^			
			<	IN =	544	<		
			>	OUT =	544	>		
				v	^			
				294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				83	71			
				v	^			
		0	<	IN =	153	<		0
		0	>	OUT =	153	>		0
				v	^			
				83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				434	**583**			
				v	^			
			<	IN =	1017	<		
			>	OUT =	1017	>		
				v	^			
				434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				6	**6**			
				v	^			
			<	IN =	12	<		
			>	OUT =	12	>		
				v	^			
				6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				123	165			
				v	^			
		0	<	IN =	288	<		0
		0	>	OUT =	288	>		0
				v	^			
				123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				40	94			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				40	90			
				v	^			
		0	<	IN =	130	<		0
		0	>	OUT =	130	>		0
				v	^			
				40	90			

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

				0	10			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				0	10			

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**30**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**30**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**40**	BOUND	THRU	**29**	IN ...	**30**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**30**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **8.8%**	BOUND	THRU	**24**	**30**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**40**	RATIO **8.8%**	BOUND	THRU	**29**	**30**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: S Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	24	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24				
					v	^				
		0	<	IN =		53	<			0
		0	>	OUT =		53	>			0
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	2	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	26	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**				
					v	^				
			<	IN =		360	<			
			>	OUT =		360	>			
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70				
					v	^				
		0	<	IN =		138	<			0
		0	>	OUT =		138	>			0
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**				
					v	^				
			<	IN =		583	<			
			>	OUT =		583	>			
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**				
					v	^				
			<	IN =		8	<			
			>	OUT =		8	>			
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88				
					v	^				
		0	<	IN =		224	<			0
		0	>	OUT =		224	>			0
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20				
					v	^				
		0	<	IN =		90	<			0
		0	>	OUT =		90	>			0
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

					10	0				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					10	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	19	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19				
					v	^				
		0	<	IN =		48	<			0
		0	>	OUT =		48	>			0
					v	^				
					29	19				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	5	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	24	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**				
					v	^				
			<	IN =		544	<			
			>	OUT =		544	>			
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71				
					v	^				
		0	<	IN =		153	<			0
		0	>	OUT =		153	>			0
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**				
					v	^				
			<	IN =		1017	<			
			>	OUT =		1017	>			
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**				
					v	^				
			<	IN =		12	<			
			>	OUT =		12	>			
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165				
					v	^				
		0	<	IN =		288	<			0
		0	>	OUT =		288	>			0
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90				
					v	^				
		0	<	IN =		130	<			0
		0	>	OUT =		130	>			0
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

					0	10				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					0	10				

Valle Vista Road (NS) at: S Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**30**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**30**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**40**	BOUND	THRU	**29**	IN ...	**30**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**30**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **8.8%**	BOUND	THRU	**24**	**30**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**40**	RATIO **8.8%**	BOUND	THRU	**29**	**30**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
					<	^	>			
					0	2	21			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						94	31			
						v	^			
			272	<			<		162	
			27	>			>		-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

						10	0			
						v	^			
			30	<			<		20	
			0	>			>		10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
					<	^	>			
					3	10	15			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						43	110			
						v	^			
			72	<			<		4	
			197	>			>		62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

						0	10			
						v	^			
			10	<			<		10	
			20	>			>		10	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**190**	BOUND	THRU	**30**	IN ...	**130**
	RIGHT	**85**	OUT ...	**80**		RIGHT	**46**	OUT ...	**220**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**390**	BOUND	THRU	**485**	IN ...	**620**
	RIGHT	**8**	OUT ...	**550**		RIGHT	**12**	OUT ...	**520**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**580**	BOUND	THRU	**445**	IN ...	**600**
	RIGHT	**32**	OUT ...	**600**		RIGHT	**59**	OUT ...	**750**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**9**	NORTH LEG	NORTH	LEFT	**18**	**18**	NORTH LEG
BOUND	THRU	**15**	**15**	RATIO **6.7%**	BOUND	THRU	**50**	**52**	RATIO **8.7%**
	RIGHT	**190**	**190**	ADT 4,100		RIGHT	**193**	**194**	ADT 4,100
SOUTH	LEFT	**60**	**62**	SOUTH LEG	SOUTH	LEFT	**58**	**59**	SOUTH LEG
BOUND	THRU	**38**	**38**	RATIO **8.0%**	BOUND	THRU	**30**	**30**	RATIO **8.6%**
	RIGHT	**85**	**92**	ADT 4,600		RIGHT	**46**	**47**	ADT 4,600
EAST	LEFT	**36**	**36**	EAST LEG	EAST	LEFT	**98**	**107**	EAST LEG
BOUND	THRU	**344**	**350**	RATIO **7.7%**	BOUND	THRU	**485**	**504**	RATIO **8.8%**
	RIGHT	**8**	**8**	ADT 15,400		RIGHT	**12**	**13**	ADT 15,400
WEST	LEFT	**108**	**108**	WEST LEG	WEST	LEFT	**84**	**87**	WEST LEG
BOUND	THRU	**421**	**449**	RATIO **7.3%**	BOUND	THRU	**445**	**456**	RATIO **8.8%**
	RIGHT	**32**	**32**	ADT 13,000		RIGHT	**59**	**61**	ADT 13,000

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6				
				<	v	>				
		4	^				^	5		
		509	>				<	483		
		16	v				v	15		
				<	^	>				
				25	2	29				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11				
					v	^				
			514	<	IN	=	1101	<	503	
			529	>	OUT	=	1101	>	544	
					v	^				
					32	56				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	3		
		82	>				<	89		
		4	v				v	2		
				<	^	>				
				0	0	4				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6				
				<	v	>				
		4	^				^	8		
		591	>				<	572		
		20	v				v	17		
				<	^	>				
				25	2	33				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
			997	<	IN	=	1768	<	**997**	
			771	>	OUT	=	1768	>	**771**	
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
			14	<	IN	=	28	<	**14**	
			14	>	OUT	=	28	>	**14**	
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
			384	<	IN	=	681	<	384	
			298	>	OUT	=	681	>	298	
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
			1408	<	IN	=	2121	<	**1408**	
			713	>	OUT	=	2121	>	**713**	
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
			31	<	IN	=	48	<	**31**	
			17	>	OUT	=	48	>	**17**	
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
			545	<	IN	=	822	<	545	
			277	>	OUT	=	822	>	277	
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
			162	<				<	162	
			-21	>				>	-21	
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
			160	<	IN	=	220	<	160	
			60	>	OUT	=	220	>	60	
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

					0	0				
					v	^				
			20	<				<	20	
			10	>				>	10	
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5				
				<	v	>				
		10	^				^	4		
		589	>				<	537		
		50	v				v	33		
				<	^	>				
				26	0	15				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14				
					v	^				
			569	<	IN	=	1275	<	574	
			649	>	OUT	=	1275	>	609	
					v	^				
					83	41				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0				
				<	v	>				
		0	^				^	2		
		84	>				<	35		
		2	v				v	5		
				<	^	>				
				2	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5				
				<	v	>				
		10	^				^	6		
		673	>				<	572		
		52	v				v	38		
				<	^	>				
				28	0	18				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
			1333	<	IN	=	2884	<	**1333**	
			1551	>	OUT	=	2884	>	**1551**	
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
			21	<	IN	=	46	<	**21**	
			25	>	OUT	=	46	>	**25**	
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
			378	<	IN	=	819	<	378	
			441	>	OUT	=	819	>	441	
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
			1330	<	IN	=	3088	<	**1330**	
			1758	>	OUT	=	3088	>	**1758**	
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
			41	<	IN	=	82	<	**41**	
			41	>	OUT	=	82	>	**41**	
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
			383	<	IN	=	885	<	383	
			502	>	OUT	=	885	>	502	
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
			4	<				<	4	
			62	>				>	62	
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
			60	<	IN	=	130	<	60	
			70	>	OUT	=	130	>	70	
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

					0	0				
					v	^				
			10	<				<	10	
			10	>				>	10	
					v	^				
					0	0				

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**630**	BOUND	THRU	**673**	IN ...	**750**
	RIGHT	**20**	OUT ...	**620**		RIGHT	**52**	OUT ...	**620**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**620**	BOUND	THRU	**572**	IN ...	**630**
	RIGHT	**8**	OUT ...	**640**		RIGHT	**6**	OUT ...	**710**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**25**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**33**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **6.2%**	BOUND	THRU	**2**	**2**	RATIO **8.9%**
	RIGHT	**6**	**6**	ADT 1,600		RIGHT	**8**	**11**	ADT 1,600
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**602**	RATIO **8.2%**	BOUND	THRU	**673**	**683**	RATIO **8.7%**
	RIGHT	**20**	**20**	ADT 15,300		RIGHT	**52**	**53**	ADT 15,300
WEST	LEFT	**17**	**18**	WEST LEG	WEST	LEFT	**38**	**38**	WEST LEG
BOUND	THRU	**572**	**591**	RATIO **8.0%**	BOUND	THRU	**572**	**580**	RATIO **8.8%**
	RIGHT	**8**	**8**	ADT 15,600		RIGHT	**6**	**8**	ADT 15,600

Opening Year (2018)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					17	9				
					v	^				
		152	<	IN	=	632	<	304		
		249	>	OUT	=	632	>	274		
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
				<	^	>				
				2	0	20				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					374	**166**				
					v	^				
		177	<	IN	=	1173	<	**197**		
		327	>	OUT	=	1173	>	**311**		
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					3	**3**				
					v	^				
		7	<	IN	=	22	<	**8**		
		7	>	OUT	=	21	>	**7**		
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					143	64				
					v	^				
		70	<	IN	=	453	<	78		
		127	>	OUT	=	453	>	121		
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					613	**273**				
					v	^				
		263	<	IN	=	1517	<	**288**		
		314	>	OUT	=	1517	>	**312**		
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**5**				
					v	^				
		14	<	IN	=	38	<	**15**		
		11	>	OUT	=	38	>	**11**		
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					235	105				
					v	^				
		105	<	IN	=	589	<	114		
		123	>	OUT	=	589	>	122		
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					92	41				
					v	^				
		35	<				<	37		
		-4	>				>	2		
					v	^				
					58	11				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					90	40				
					v	^				
		40	<	IN	=	170	<	40		
		30	>	OUT	=	170	>	30		
					v	^				
					60	10				

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

					10	10				
					v	^				
		10	<				<	10		
		0	>				>	0		
					v	^				
					10	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	21				
					v	^				
		261	<	IN	=	773	<	467		
		242	>	OUT	=	773	>	262		
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
				<	^	>				
				0	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					346	**524**				
					v	^				
		490	<	IN	=	2005	<	**500**		
		446	>	OUT	=	2004	>	**450**		
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					5	**5**				
					v	^				
		9	<	IN	=	36	<	**9**		
		16	>	OUT	=	36	>	**16**		
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					98	148				
					v	^				
		139	<	IN	=	570	<	142		
		129	>	OUT	=	570	>	130		
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					537	**783**				
					v	^				
		673	<	IN	=	2578	<	**540**		
		509	>	OUT	=	2578	>	**483**		
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**7**				
					v	^				
		23	<	IN	=	64	<	**23**		
		25	>	OUT	=	63	>	**25**		
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					152	221				
					v	^				
		194	<	IN	=	738	<	157		
		149	>	OUT	=	738	>	141		
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					54	73				
					v	^				
		55	<				<	15		
		20	>				>	11		
					v	^				
					28	79				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	70				
					v	^				
		50	<	IN	=	210	<	50		
		30	>	OUT	=	180	>	30		
					v	^				
					30	80				

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

					10	10				
					v	^				
		10	<				<	10		
		0	>				>	0		
					v	^				
					0	10				

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**80**	BOUND	THRU	**5**	IN ...	**70**
	RIGHT	**65**	OUT ...	**250**		RIGHT	**37**	OUT ...	**270**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**30**	BOUND	THRU	**3**	IN ...	**20**
	RIGHT	**0**	OUT ...	**20**		RIGHT	**1**	OUT ...	**30**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**310**	BOUND	THRU	**264**	IN ...	**290**
	RIGHT	**30**	OUT ...	**230**		RIGHT	**21**	OUT ...	**310**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**430**	BOUND	THRU	**279**	IN ...	**540**
	RIGHT	**7**	OUT ...	**350**		RIGHT	**14**	OUT ...	**320**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**16**	NORTH LEG	NORTH	LEFT	**14**	**19**	NORTH LEG
BOUND	THRU	**3**	**4**	RATIO **8.0%**	BOUND	THRU	**5**	**9**	RATIO **8.3%**
	RIGHT	**65**	**65**	ADT 600		RIGHT	**37**	**43**	ADT 600
SOUTH	LEFT	**5**	**9**	SOUTH LEG	SOUTH	LEFT	**7**	**12**	SOUTH LEG
BOUND	THRU	**12**	**20**	RATIO **8.9%**	BOUND	THRU	**3**	**6**	RATIO **9.0%**
	RIGHT	**0**	**0**	ADT 3,800		RIGHT	**1**	**2**	ADT 3,800
EAST	LEFT	**3**	**4**	EAST LEG	EAST	LEFT	**2**	**3**	EAST LEG
BOUND	THRU	**277**	**279**	RATIO **7.9%**	BOUND	THRU	**264**	**265**	RATIO **8.8%**
	RIGHT	**30**	**30**	ADT 9,900		RIGHT	**21**	**24**	ADT 9,900
WEST	LEFT	**202**	**202**	WEST LEG	WEST	LEFT	**240**	**240**	WEST LEG
BOUND	THRU	**202**	**216**	RATIO **8.0%**	BOUND	THRU	**279**	**289**	RATIO **8.9%**
	RIGHT	**7**	**11**	ADT 6,800		RIGHT	**14**	**18**	ADT 6,800

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
			15	^				^	24	
			245	>				<	249	
			36	v				v	14	
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
			297	<	IN	=	686	<	287	
			296	>	OUT	=	686	>	292	
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
			2	^				^	7	
			54	>				<	158	
			2	v				v	12	
					<	^	>			
					9	0	5			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
			17	^				^	31	
			299	>				<	407	
			38	v				v	26	
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			197	<	IN	=	510	<	**197**	
			311	>	OUT	=	511	>	**314**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			8	<	IN	=	17	<	**8**	
			7	>	OUT	=	18	>	**10**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
			78	<	IN	=	199	<	78	
			121	>	OUT	=	200	>	123	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			290	<	IN	=	646	<	**290**	
			354	>	OUT	=	646	>	**356**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
			15	<	IN	=	27	<	**15**	
			11	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
			115	<	IN	=	254	<	115	
			138	>	OUT	=	255	>	140	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						0	0			
						v	^			
			38	<				<	38	
			18	>				>	17	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						0	10			
						v	^			
			50	<	IN	=	90	<	50	
			40	>	OUT	=	100	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

						0	0			
						v	^			
			10	<				<	10	
			10	>				>	10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
			28	^				^	83	
			224	>				<	404	
			33	v				v	50	
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
			506	<	IN	=	1083	<	537	
			285	>	OUT	=	1083	>	323	
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
			2	^				^	7	
			33	>				<	46	
			3	v				v	6	
					<	^	>			
					14	3	6			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
			30	^				^	90	
			257	>				<	450	
			36	v				v	56	
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			500	<	IN	=	952	<	**500**	
			450	>	OUT	=	954	>	**454**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			9	<	IN	=	27	<	**9**	
			16	>	OUT	=	29	>	**20**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
			142	<	IN	=	273	<	142	
			130	>	OUT	=	274	>	132	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			616	<	IN	=	1138	<	**616**	
			520	>	OUT	=	1140	>	**524**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**0**			
						v	^			
			23	<	IN	=	51	<	**23**	
			26	>	OUT	=	52	>	**29**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
			178	<	IN	=	331	<	178	
			152	>	OUT	=	332	>	154	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						0	0			
						v	^			
			36	<				<	36	
			22	>				>	22	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						10	10			
						v	^			
			60	<	IN	=	100	<	60	
			30	>	OUT	=	110	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

						0	0			
						v	^			
			10	<				<	10	
			0	>				>	10	
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**360**	BOUND	THRU	**257**	IN ...	**320**
	RIGHT	**38**	OUT ...	**470**		RIGHT	**36**	OUT ...	**580**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**470**	BOUND	THRU	**450**	IN ...	**620**
	RIGHT	**31**	OUT ...	**370**		RIGHT	**90**	OUT ...	**370**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**41**	NORTH LEG	NORTH	LEFT	**89**	**90**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.0%**	BOUND	THRU	**27**	**27**	RATIO **8.5%**
	RIGHT	**43**	**43**	ADT 2,900		RIGHT	**81**	**82**	ADT 2,900
SOUTH	LEFT	**14**	**14**	SOUTH LEG	SOUTH	LEFT	**26**	**26**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.0%**	BOUND	THRU	**38**	**39**	RATIO **8.5%**
	RIGHT	**17**	**17**	ADT 3,900		RIGHT	**29**	**29**	ADT 3,900
EAST	LEFT	**17**	**17**	EAST LEG	EAST	LEFT	**30**	**30**	EAST LEG
BOUND	THRU	**299**	**310**	RATIO **7.5%**	BOUND	THRU	**257**	**258**	RATIO **8.8%**
	RIGHT	**38**	**39**	ADT 11,200		RIGHT	**36**	**37**	ADT 11,200
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**56**	WEST LEG
BOUND	THRU	**407**	**416**	RATIO **8.1%**	BOUND	THRU	**450**	**466**	RATIO **8.8%**
	RIGHT	**31**	**31**	ADT 10,400		RIGHT	**90**	**95**	ADT 10,400

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				77	86	94		
				<	v	>		
		39	^				^	29
		214	>				<	300
		32	v				v	122
				<	^	>		
				52	92	101		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					257	160		
					v	^		
		429	<	IN	=	1238	<	451
		285	>	OUT	=	1238	>	409
					v	^		
					240	245		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				13	5	20		
				<	v	>		
		9	^				^	3
		56	>				<	68
		8	v				v	5
				<	^	>		
				15	20	18		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				90	91	114		
				<	v	>		
		48	^				^	32
		270	>				<	368
		40	v				v	127
				<	^	>		
				67	112	119		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					720	**305**		
					v	^		
		197	<	IN	=	2198	<	**793**
		314	>	OUT	=	2197	>	**502**
					v	^		
					1193	**371**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					7	**10**		
					v	^		
		8	<	IN	=	41	<	**13**
		10	>	OUT	=	40	>	**12**
					v	^		
					10	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					276	119		
					v	^		
		78	<	IN	=	849	<	306
		123	>	OUT	=	848	>	195
					v	^		
					457	145		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					674	**289**		
					v	^		
		290	<	IN	=	2869	<	**1412**
		356	>	OUT	=	2867	>	**586**
					v	^		
					1702	**427**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					11	**8**		
					v	^		
		15	<	IN	=	71	<	**35**
		14	>	OUT	=	69	>	**17**
					v	^		
					29	**11**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					260	112		
					v	^		
		115	<	IN	=	1114	<	548
		140	>	OUT	=	1112	>	228
					v	^		
					656	166		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					-16	-7		
					v	^		
		38	<			<		243
		17	>			>		34
					v	^		
					200	21		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	20		
					v	^		
		50	<	IN	=	330	<	240
		40	>	OUT	=	320	>	50
					v	^		
					200	20		

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

					0	0		
					v	^		
		10	<			<		40
		10	>			>		10
					v	^		
					30	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				95	87	111		
				<	v	>		
		83	^				^	45
		270	>				<	363
		36	v				v	99
				<	^	>		
				106	145	171		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					293	273		
					v	^		
		564	<	IN	=	1611	<	507
		389	>	OUT	=	1611	>	552
					v	^		
					222	422		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				12	4	7		
				<	v	>		
		2	^				^	10
		40	>				<	50
		0	v				v	9
				<	^	>		
				5	14	17		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				107	91	118		
				<	v	>		
		85	^				^	55
		310	>				<	413
		36	v				v	108
				<	^	>		
				111	159	188		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					588	**830**		
					v	^		
		500	<	IN	=	3381	<	**945**
		454	>	OUT	=	3378	>	**1212**
					v	^		
					836	**1394**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					12	**10**		
					v	^		
		9	<	IN	=	61	<	**18**
		20	>	OUT	=	58	>	**21**
					v	^		
					18	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					168	235		
					v	^		
		142	<	IN	=	962	<	269
		132	>	OUT	=	960	>	345
					v	^		
					239	393		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					541	**809**		
					v	^		
		616	<	IN	=	4205	<	**1204**
		524	>	OUT	=	4204	>	**1782**
					v	^		
					997	**1936**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					12	**16**		
					v	^		
		23	<	IN	=	113	<	**42**
		29	>	OUT	=	110	>	**43**
					v	^		
					28	**30**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					154	231		
					v	^		
		178	<	IN	=	1206	<	348
		154	>	OUT	=	1205	>	510
					v	^		
					286	550		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					-13	-4		
					v	^		
		36	<			<		79
		22	>			>		165
					v	^		
					48	157		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	30		
					v	^		
		60	<	IN	=	310	<	80
		40	>	OUT	=	310	>	170
					v	^		
					50	160		

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

					0	0		
					v	^		
		10	<			<		10
		10	>			>		30
					v	^		
					10	20		

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**300**	BOUND	THRU	**159**	IN ...	**480**
	RIGHT	**119**	OUT ...	**290**		RIGHT	**188**	OUT ...	**250**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**300**	BOUND	THRU	**91**	IN ...	**320**
	RIGHT	**90**	OUT ...	**190**		RIGHT	**107**	OUT ...	**300**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**370**	BOUND	THRU	**310**	IN ...	**440**
	RIGHT	**40**	OUT ...	**540**		RIGHT	**36**	OUT ...	**640**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**570**	BOUND	THRU	**413**	IN ...	**590**
	RIGHT	**32**	OUT ...	**510**		RIGHT	**55**	OUT ...	**650**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**67**	NORTH LEG	NORTH	LEFT	**111**	**115**	NORTH LEG
BOUND	THRU	**112**	**113**	RATIO **6.9%**	BOUND	THRU	**159**	**162**	RATIO **8.7%**
	RIGHT	**119**	**121**	ADT 7,200		RIGHT	**188**	**206**	ADT 7,200
SOUTH	LEFT	**114**	**115**	SOUTH LEG	SOUTH	LEFT	**118**	**122**	SOUTH LEG
BOUND	THRU	**91**	**98**	RATIO **7.1%**	BOUND	THRU	**91**	**95**	RATIO **8.8%**
	RIGHT	**90**	**90**	ADT 8,300		RIGHT	**107**	**109**	ADT 8,300
EAST	LEFT	**48**	**49**	EAST LEG	EAST	LEFT	**85**	**86**	EAST LEG
BOUND	THRU	**270**	**276**	RATIO **7.7%**	BOUND	THRU	**310**	**322**	RATIO **8.8%**
	RIGHT	**40**	**44**	ADT 14,100		RIGHT	**36**	**38**	ADT 14,100
WEST	LEFT	**127**	**148**	WEST LEG	WEST	LEFT	**108**	**117**	WEST LEG
BOUND	THRU	**368**	**386**	RATIO **7.4%**	BOUND	THRU	**413**	**421**	RATIO **8.8%**
	RIGHT	**32**	**33**	ADT 12,400		RIGHT	**55**	**55**	ADT 12,400

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				58	168	13		
				<	v	>		
		21	^				^	21
		39	>				<	87
		22	v				v	71
				<	^	>		
				58	268	125		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					239	310		
					v	^		
		203	<	IN	=	951	<	179
		82	>	OUT	=	951	>	177
					v	^		
					261	451		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				6	11	4		
				<	v	>		
		11	^				^	3
		7	>				<	5
		5	v				v	9
				<	^	>		
				7	25	24		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				64	179	17		
				<	v	>		
		32	^				^	24
		46	>				<	92
		27	v				v	80
				<	^	>		
				65	293	149		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					1193	**371**		
					v	^		
		694	<	IN	=	1564	<	**0**
		76	>	OUT	=	1564	>	**0**
					v	^		
					499	**295**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					10	**11**		
					v	^		
		0	<	IN	=	20	<	**0**
		0	>	OUT	=	21	>	**0**
					v	^		
					10	**10**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					457	145		
					v	^		
		264	<	IN	=	601	<	0
		29	>	OUT	=	601	>	0
					v	^		
					193	115		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					1702	**427**		
					v	^		
		754	<	IN	=	2129	<	**0**
		97	>	OUT	=	2129	>	**0**
					v	^		
					948	**330**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					29	**11**		
					v	^		
		1	<	IN	=	40	<	**0**
		1	>	OUT	=	40	>	**0**
					v	^		
					28	**10**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					656	166		
					v	^		
		287	<	IN	=	822	<	0
		37	>	OUT	=	822	>	0
					v	^		
					370	129		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					200	21		
					v	^		
		23	<			<		0
		8	>			>		0
					v	^		
					177	13		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					200	30		
					v	^		
		20	<	IN	=	240	<	20
		10	>	OUT	=	250	>	20
					v	^		
					180	10		

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

					30	0		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					30	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				90	92	14		
				<	v	>		
		28	^				^	30
		35	>				<	50
		19	v				v	51
				<	^	>		
				54	359	193		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					196	417		
					v	^		
		194	<	IN	=	1015	<	131
		82	>	OUT	=	1015	>	242
					v	^		
					162	606		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				5	5	2		
				<	v	>		
		0	^				^	3
		2	>				<	2
		0	v				v	0
				<	^	>		
				2	46	30		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				95	97	16		
				<	v	>		
		28	^				^	33
		37	>				<	52
		19	v				v	51
				<	^	>		
				56	405	223		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					836	**1394**		
					v	^		
		178	<	IN	=	2229	<	**0**
		677	>	OUT	=	2230	>	**0**
					v	^		
					658	**716**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					18	**11**		
					v	^		
		1	<	IN	=	30	<	**0**
		1	>	OUT	=	29	>	**0**
					v	^		
					17	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					239	393		
					v	^		
		50	<	IN	=	632	<	0
		190	>	OUT	=	632	>	0
					v	^		
					188	203		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					997	**1936**		
					v	^		
		212	<	IN	=	2933	<	**0**
		745	>	OUT	=	2933	>	**0**
					v	^		
					785	**1191**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					28	**30**		
					v	^		
		1	<	IN	=	58	<	**0**
		1	>	OUT	=	58	>	**0**
					v	^		
					27	**29**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					286	550		
					v	^		
		60	<	IN	=	836	<	0
		209	>	OUT	=	836	>	0
					v	^		
					227	341		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					48	157		
					v	^		
		10	<			<		0
		19	>			>		0
					v	^		
					38	138		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	160		
					v	^		
		20	<	IN	=	220	<	10
		20	>	OUT	=	250	>	30
					v	^		
					40	140		

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

					10	20		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					10	20		

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**710**
	RIGHT	**149**	OUT ...	**320**		RIGHT	**223**	OUT ...	**180**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**290**	BOUND	THRU	**97**	IN ...	**220**
	RIGHT	**64**	OUT ...	**350**		RIGHT	**95**	OUT ...	**490**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**80**
	RIGHT	**27**	OUT ...	**220**		RIGHT	**19**	OUT ...	**200**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**200**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**210**		RIGHT	**33**	OUT ...	**280**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**65**	NORTH LEG	NORTH	LEFT	**56**	**57**	NORTH LEG
BOUND	THRU	**293**	**294**	RATIO **7.9%**	BOUND	THRU	**405**	**428**	RATIO **8.8%**
	RIGHT	**149**	**150**	ADT 8,100		RIGHT	**223**	**228**	ADT 8,100
SOUTH	LEFT	**17**	**17**	SOUTH LEG	SOUTH	LEFT	**16**	**17**	SOUTH LEG
BOUND	THRU	**179**	**204**	RATIO **8.3%**	BOUND	THRU	**97**	**107**	RATIO **8.9%**
	RIGHT	**64**	**66**	ADT 10,000		RIGHT	**95**	**96**	ADT 10,000
EAST	LEFT	**32**	**33**	EAST LEG	EAST	LEFT	**28**	**28**	EAST LEG
BOUND	THRU	**46**	**46**	RATIO **8.6%**	BOUND	THRU	**37**	**38**	RATIO **8.9%**
	RIGHT	**27**	**30**	ADT 4,800		RIGHT	**19**	**19**	ADT 4,800
WEST	LEFT	**80**	**86**	WEST LEG	WEST	LEFT	**51**	**54**	WEST LEG
BOUND	THRU	**92**	**92**	RATIO **9.8%**	BOUND	THRU	**52**	**53**	RATIO **8.6%**
	RIGHT	**24**	**24**	ADT 3,400		RIGHT	**33**	**35**	ADT 3,400

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2			
				<	v	>			
		0	^				^	1	
		402	>				<	575	
		2	v				v	10	
				<	^	>			
				3	0	6			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1			
					v	^			
		578	<	IN =	1001	<	586		
		404	>	OUT =	1001	>	410		
					v	^			
					12	9			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0			
				<	v	>			
		0	^				^	0	
		64	>				<	52	
		0	v				v	0	
				<	^	>			
				0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2			
				<	v	>			
		0	^				^	1	
		466	>				<	627	
		2	v				v	10	
				<	^	>			
				3	0	6			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**			
					v	^			
		793	<	IN =	1295	<	**793**		
		502	>	OUT =	1295	>	**502**		
					v	^			
					0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
		13	<	IN =	25	<	**13**		
		12	>	OUT =	25	>	**12**		
					v	^			
					0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0			
					v	^			
		306	<	IN =	500	<	306		
		195	>	OUT =	500	>	195		
					v	^			
					0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**			
					v	^			
		1412	<	IN =	1998	<	**1412**		
		586	>	OUT =	1998	>	**586**		
					v	^			
					0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**			
					v	^			
		35	<	IN =	52	<	**35**		
		17	>	OUT =	52	>	**17**		
					v	^			
					0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0			
					v	^			
		548	<	IN =	777	<	548		
		228	>	OUT =	777	>	228		
					v	^			
					0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0			
					v	^			
		243	<			<	243		
		34	>			>	34		
					v	^			
					0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0			
					v	^			
		240	<	IN =	290	<	240		
		50	>	OUT =	290	>	50		
					v	^			
					0	0			

FUTURE YEAR GROWTH: 2016 TO **2018**

2 YEARS

					0	0			
					v	^			
		20	<			<	20		
		0	>			>	0		
					v	^			
					0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5			
				<	v	>			
		3	^				^	2	
		637	>				<	524	
		2	v				v	14	
				<	^	>			
				10	0	7			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5			
					v	^			
		536	<	IN =	1206	<	540		
		642	>	OUT =	1206	>	649		
					v	^			
					16	17			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0			
				<	v	>			
		0	^				^	0	
		61	>				<	24	
		0	v				v	0	
				<	^	>			
				0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5			
				<	v	>			
		3	^				^	2	
		698	>				<	548	
		2	v				v	14	
				<	^	>			
				10	0	7			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**			
					v	^			
		945	<	IN =	2157	<	**945**		
		1212	>	OUT =	2157	>	**1212**		
					v	^			
					0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
		18	<	IN =	39	<	**18**		
		21	>	OUT =	39	>	**21**		
					v	^			
					0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0			
					v	^			
		269	<	IN =	614	<	269		
		345	>	OUT =	614	>	345		
					v	^			
					0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**			
					v	^			
		1204	<	IN =	2986	<	**1204**		
		1782	>	OUT =	2986	>	**1782**		
					v	^			
					0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**			
					v	^			
		42	<	IN =	85	<	**42**		
		43	>	OUT =	85	>	**43**		
					v	^			
					0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0			
					v	^			
		348	<	IN =	857	<	348		
		510	>	OUT =	857	>	510		
					v	^			
					0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0			
					v	^			
		79	<			<	79		
		165	>			>	165		
					v	^			
					0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0			
					v	^			
		80	<	IN =	250	<	80		
		170	>	OUT =	250	>	170		
					v	^			
					0	0			

FUTURE YEAR GROWTH: 2016 TO 2018

2 YEARS

					0	0			
					v	^			
		10	<			<	10		
		10	>			>	10		
					v	^			
					0	0			

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**470**	BOUND	THRU	**698**	IN ...	**720**
	RIGHT	**2**	OUT ...	**660**		RIGHT	**2**	OUT ...	**570**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**660**	BOUND	THRU	**548**	IN ...	**570**
	RIGHT	**1**	OUT ...	**470**		RIGHT	**2**	OUT ...	**720**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**465**	RATIO **8.1%**	BOUND	THRU	**698**	**706**	RATIO **9.2%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**656**	RATIO **8.0%**	BOUND	THRU	**548**	**554**	RATIO **9.1%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

				0	0			
				v	^			
			40 <		<	40		
			10 >		>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

				0	0			
				v	^			
			10 <		<	10		
			30 >		>	30		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**650**
	RIGHT	**0**	OUT ...	**580**		RIGHT	**0**	OUT ...	**580**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**580**	BOUND	THRU	**568**	IN ...	**580**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**650**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**650**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,100		RIGHT	**0**	**0**	ADT 14,100
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**580**	RATIO **7.2%**	BOUND	THRU	**568**	**580**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,100		RIGHT	**0**	**0**	ADT 14,100

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

				0	0			
				v	^			
			40 <		<	40		
			10 >		>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

				0	0			
				v	^			
			10 <		<	10		
			30 >		>	30		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**650**
	RIGHT	**0**	OUT ...	**580**		RIGHT	**0**	OUT ...	**580**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**580**	BOUND	THRU	**568**	IN ...	**580**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**650**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**650**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,100		RIGHT	**0**	**0**	ADT 14,100
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**580**	RATIO **7.2%**	BOUND	THRU	**568**	**580**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,100		RIGHT	**0**	**0**	ADT 14,100

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					14	2	9			
					<	v	>			
		19	^					^		11
		324	>					<		400
		16	v					v		11
					<	^	>			
					5	1	18			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						25	31			
						v	^			
				419	<	IN	=	830	<	422
				359	>	OUT	=	830	>	351
						v	^			
						29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	0	2			
					<	v	>			
		0	^					^		3
		63	>					<		116
		2	v					v		0
					<	^	>			
					2	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					22	2	11			
					<	v	>			
		19	^					^		14
		387	>					<		516
		18	v					v		11
					<	^	>			
					7	1	18			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						53	**81**			
						v	^			
				793	<	IN	=	1721	<	**983**
				502	>	OUT	=	1720	>	**669**
						v	^			
						177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				13	<	IN	=	28	<	**14**
				12	>	OUT	=	28	>	**13**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						20	31			
						v	^			
				306	<	IN	=	663	<	378
				195	>	OUT	=	663	>	259
						v	^			
						68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						141	**129**			
						v	^			
				1412	<	IN	=	2632	<	**1678**
				586	>	OUT	=	2632	>	**735**
						v	^			
						356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						1	**1**			
						v	^			
				35	<	IN	=	60	<	**38**
				17	>	OUT	=	60	>	**20**
						v	^			
						4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						54	49			
						v	^			
				548	<	IN	=	1020	<	650
				228	>	OUT	=	1020	>	286
						v	^			
						137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						34	19			
						v	^			
				243	<			<		272
				34	>			>		27
						v	^			
						69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
				240	<	IN	=	360	<	270
				40	>	OUT	=	370	>	40
						v	^			
						70	20			

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

						0	0			
						v	^			
				40	<			<		40
				10	>			>		10
						v	^			
						10	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					16	0	10			
					<	v	>			
		26	^					^		15
		529	>					<		488
		12	v					v		18
					<	^	>			
					6	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						26	41			
						v	^			
				510	<	IN	=	1129	<	521
				567	>	OUT	=	1129	>	548
						v	^			
						30	15			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	0	7			
					<	v	>			
		8	^					^		3
		46	>					<		52
		0	v					v		0
					<	^	>			
					5	0	2			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					18	0	17			
					<	v	>			
		34	^					^		18
		575	>					<		540
		12	v					v		18
					<	^	>			
					11	0	11			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						125	**83**			
						v	^			
				945	<	IN	=	2793	<	**1206**
				1212	>	OUT	=	2793	>	**1471**
						v	^			
						294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				18	<	IN	=	43	<	**20**
				21	>	OUT	=	44	>	**24**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						35	23			
						v	^			
				269	<	IN	=	793	<	343
				345	>	OUT	=	793	>	418
						v	^			
						83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						232	**246**			
						v	^			
				1204	<	IN	=	4038	<	**1441**
				1782	>	OUT	=	4038	>	**2154**
						v	^			
						434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**2**			
						v	^			
				42	<	IN	=	97	<	**46**
				43	>	OUT	=	98	>	**48**
						v	^			
						6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						65	69			
						v	^			
				348	<	IN	=	1155	<	415
				510	>	OUT	=	1155	>	615
						v	^			
						123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						30	46			
						v	^			
				79	<			<		72
				165	>			>		197
						v	^			
						40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	50			
						v	^			
				80	<	IN	=	360	<	70
				170	>	OUT	=	370	>	200
						v	^			
						40	90			

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

						0	10			
						v	^			
				10	<			<		10
				30	>			>		30
						v	^			
						10	10			

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**30**	BOUND	THRU	**0**	IN ...	**30**
	RIGHT	**18**	OUT ...	**40**		RIGHT	**11**	OUT ...	**40**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**40**	BOUND	THRU	**0**	IN ...	**40**
	RIGHT	**22**	OUT ...	**30**		RIGHT	**18**	OUT ...	**60**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**430**	BOUND	THRU	**575**	IN ...	**650**
	RIGHT	**18**	OUT ...	**590**		RIGHT	**12**	OUT ...	**580**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**590**	BOUND	THRU	**540**	IN ...	**590**
	RIGHT	**14**	OUT ...	**430**		RIGHT	**18**	OUT ...	**630**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**8**	NORTH LEG	NORTH	LEFT	**11**	**15**	NORTH LEG
BOUND	THRU	**1**	**1**	RATIO **6.7%**	BOUND	THRU	**0**	**0**	RATIO **9.1%**
	RIGHT	**18**	**22**	ADT 1,100		RIGHT	**11**	**15**	ADT 1,100
SOUTH	LEFT	**11**	**13**	SOUTH LEG	SOUTH	LEFT	**17**	**20**	SOUTH LEG
BOUND	THRU	**2**	**3**	RATIO **9.0%**	BOUND	THRU	**0**	**0**	RATIO **8.8%**
	RIGHT	**22**	**24**	ADT 800		RIGHT	**18**	**20**	ADT 800
EAST	LEFT	**19**	**19**	EAST LEG	EAST	LEFT	**34**	**39**	EAST LEG
BOUND	THRU	**387**	**391**	RATIO **7.3%**	BOUND	THRU	**575**	**595**	RATIO **8.7%**
	RIGHT	**18**	**22**	ADT 14,000		RIGHT	**12**	**16**	ADT 14,000
WEST	LEFT	**11**	**16**	WEST LEG	WEST	LEFT	**18**	**24**	WEST LEG
BOUND	THRU	**516**	**559**	RATIO **7.3%**	BOUND	THRU	**540**	**545**	RATIO **8.7%**
	RIGHT	**14**	**14**	ADT 14,100		RIGHT	**18**	**21**	ADT 14,100

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	24			
				v	^			
0	<		IN =		53	<		0
0	>		OUT =		53	>		0
				v	^			
				29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	2	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

			0	2	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	31	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	26	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				177	**183**			
				v	^			
		<	IN =		360	<		
		>	OUT =		360	>		
				v	^			
				177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
		<	IN =		4	<		
		>	OUT =		4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				68	70			
				v	^			
0	<		IN =		138	<		0
0	>		OUT =		138	>		0
				v	^			
				68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				356	**227**			
				v	^			
		<	IN =		583	<		
		>	OUT =		583	>		
				v	^			
				356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				4	**4**			
				v	^			
		<	IN =		8	<		
		>	OUT =		8	>		
				v	^			
				4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				137	88			
				v	^			
0	<		IN =		224	<		0
0	>		OUT =		224	>		0
				v	^			
				137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				69	17			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				70	20			
				v	^			
0	<		IN =		90	<		0
0	>		OUT =		90	>		0
				v	^			
				70	20			

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

				10	0			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				10	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	19	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	19			
				v	^			
0	<		IN =		48	<		0
0	>		OUT =		48	>		0
				v	^			
				29	19			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

			0	5	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				294	**250**			
				v	^			
		<	IN =		544	<		
		>	OUT =		544	>		
				v	^			
				294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
		<	IN =		4	<		
		>	OUT =		4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				83	71			
				v	^			
0	<		IN =		153	<		0
0	>		OUT =		153	>		0
				v	^			
				83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				434	**583**			
				v	^			
		<	IN =		1017	<		
		>	OUT =		1017	>		
				v	^			
				434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				6	**6**			
				v	^			
		<	IN =		12	<		
		>	OUT =		12	>		
				v	^			
				6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				123	165			
				v	^			
0	<		IN =		288	<		0
0	>		OUT =		288	>		0
				v	^			
				123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				40	94			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				40	90			
				v	^			
0	<		IN =		130	<		0
0	>		OUT =		130	>		0
				v	^			
				40	90			

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

				10	10			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				10	10			

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**30**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**40**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**30**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **8.8%**	BOUND	THRU	**24**	**30**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**40**	RATIO **8.8%**	BOUND	THRU	**29**	**40**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
				<	^	>		
				0	24	0		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24		
					v	^		
		0	<	IN =	53	<		0
		0	>	OUT =	53	>		0
					v	^		
					29	24		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
				<	^	>		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

				0	2	0		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
				<	^	>		
				0	26	0		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**		
					v	^		
			<	IN =	360	<		
			>	OUT =	360	>		
					v	^		
					177	**183**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**		
					v	^		
			<	IN =	4	<		
			>	OUT =	4	>		
					v	^		
					2	**2**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70		
					v	^		
		0	<	IN =	138	<		0
		0	>	OUT =	138	>		0
					v	^		
					68	70		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**		
					v	^		
			<	IN =	583	<		
			>	OUT =	583	>		
					v	^		
					356	**227**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**		
					v	^		
			<	IN =	8	<		
			>	OUT =	8	>		
					v	^		
					4	**4**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88		
					v	^		
		0	<	IN =	224	<		0
		0	>	OUT =	224	>		0
					v	^		
					137	88		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					69	17		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20		
					v	^		
		0	<	IN =	90	<		0
		0	>	OUT =	90	>		0
					v	^		
					70	20		

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

					10	0		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					10	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
				<	^	>		
				0	19	0		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19		
					v	^		
		0	<	IN =	48	<		0
		0	>	OUT =	48	>		0
					v	^		
					29	19		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
				<	^	>		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

				0	5	0		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
				<	^	>		
				0	24	0		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**		
					v	^		
			<	IN =	544	<		
			>	OUT =	544	>		
					v	^		
					294	**250**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**		
					v	^		
			<	IN =	4	<		
			>	OUT =	4	>		
					v	^		
					2	**2**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71		
					v	^		
		0	<	IN =	153	<		0
		0	>	OUT =	153	>		0
					v	^		
					83	71		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**		
					v	^		
			<	IN =	1017	<		
			>	OUT =	1017	>		
					v	^		
					434	**583**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**		
					v	^		
			<	IN =	12	<		
			>	OUT =	12	>		
					v	^		
					6	**6**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165		
					v	^		
		0	<	IN =	288	<		0
		0	>	OUT =	288	>		0
					v	^		
					123	165		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					40	94		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90		
					v	^		
		0	<	IN =	130	<		0
		0	>	OUT =	130	>		0
					v	^		
					40	90		

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

					10	10		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					10	10		

Valle Vista Road (NS) at: Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**30**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**40**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**30**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **8.8%**	BOUND	THRU	**24**	**30**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**40**	RATIO **8.8%**	BOUND	THRU	**29**	**40**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
					<	^	>			
					0	2	21			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						94	31			
						v	^			
			272	<				<	162	
			27	>				>	-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

						10	0			
						v	^			
			40	<				<	20	
			10	>				>	10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
					<	^	>			
					3	10	15			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						43	110			
						v	^			
			72	<				<	4	
			197	>				>	62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

						10	20			
						v	^			
			10	<				<	10	
			30	>				>	10	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**190**	BOUND	THRU	**30**	IN ...	**140**
	RIGHT	**85**	OUT ...	**80**		RIGHT	**46**	OUT ...	**230**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**400**	BOUND	THRU	**485**	IN ...	**630**
	RIGHT	**8**	OUT ...	**560**		RIGHT	**12**	OUT ...	**520**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**580**	BOUND	THRU	**445**	IN ...	**600**
	RIGHT	**32**	OUT ...	**600**		RIGHT	**59**	OUT ...	**750**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**10**	NORTH LEG	NORTH	LEFT	**18**	**18**	NORTH LEG
BOUND	THRU	**15**	**15**	RATIO **6.8%**	BOUND	THRU	**50**	**54**	RATIO **9.0%**
	RIGHT	**190**	**190**	ADT 4,100		RIGHT	**193**	**195**	ADT 4,100
SOUTH	LEFT	**60**	**60**	SOUTH LEG	SOUTH	LEFT	**58**	**59**	SOUTH LEG
BOUND	THRU	**38**	**38**	RATIO **8.0%**	BOUND	THRU	**30**	**32**	RATIO **8.6%**
	RIGHT	**85**	**96**	ADT 4,600		RIGHT	**46**	**49**	ADT 4,600
EAST	LEFT	**36**	**37**	EAST LEG	EAST	LEFT	**98**	**113**	EAST LEG
BOUND	THRU	**344**	**356**	RATIO **7.7%**	BOUND	THRU	**485**	**504**	RATIO **8.8%**
	RIGHT	**8**	**8**	ADT 15,500		RIGHT	**12**	**13**	ADT 15,500
WEST	LEFT	**108**	**108**	WEST LEG	WEST	LEFT	**84**	**85**	WEST LEG
BOUND	THRU	**421**	**454**	RATIO **7.3%**	BOUND	THRU	**445**	**452**	RATIO **8.8%**
	RIGHT	**32**	**32**	ADT 13,100		RIGHT	**59**	**63**	ADT 13,100

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6				
				<	v	>				
		4	^				^	5		
		509	>				<	483		
		16	v				v	15		
				<	^	>				
				25	2	29				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11				
					v	^				
		514	<	IN	=	1101	<	503		
		529	>	OUT	=	1101	>	544		
					v	^				
					32	56				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	3		
		82	>				<	89		
		4	v				v	2		
				<	^	>				
				0	0	4				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6				
				<	v	>				
		4	^				^	8		
		591	>				<	572		
		20	v				v	17		
				<	^	>				
				25	2	33				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		997	<	IN	=	1768	<	**997**		
		771	>	OUT	=	1768	>	**771**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		14	<	IN	=	28	<	**14**		
		14	>	OUT	=	28	>	**14**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
		384	<	IN	=	681	<	384		
		298	>	OUT	=	681	>	298		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1408	<	IN	=	2121	<	**1408**		
		713	>	OUT	=	2121	>	**713**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		31	<	IN	=	48	<	**31**		
		17	>	OUT	=	48	>	**17**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
		545	<	IN	=	822	<	545		
		277	>	OUT	=	822	>	277		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
		162	<				<	162		
		-21	>				>	-21		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		160	<	IN	=	220	<	160		
		60	>	OUT	=	220	>	60		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

					0	0				
					v	^				
		20	<				<	20		
		10	>				>	10		
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5				
				<	v	>				
		10	^				^	4		
		589	>				<	537		
		50	v				v	33		
				<	^	>				
				26	0	15				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14				
					v	^				
		569	<	IN	=	1275	<	574		
		649	>	OUT	=	1275	>	609		
					v	^				
					83	41				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0				
				<	v	>				
		0	^				^	2		
		84	>				<	35		
		2	v				v	5		
				<	^	>				
				2	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5				
				<	v	>				
		10	^				^	6		
		673	>				<	572		
		52	v				v	38		
				<	^	>				
				28	0	18				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		1333	<	IN	=	2884	<	**1333**		
		1551	>	OUT	=	2884	>	**1551**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		21	<	IN	=	46	<	**21**		
		25	>	OUT	=	46	>	**25**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
		378	<	IN	=	819	<	378		
		441	>	OUT	=	819	>	441		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1330	<	IN	=	3088	<	**1330**		
		1758	>	OUT	=	3088	>	**1758**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		41	<	IN	=	82	<	**41**		
		41	>	OUT	=	82	>	**41**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
		383	<	IN	=	885	<	383		
		502	>	OUT	=	885	>	502		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
		4	<				<	4		
		62	>				>	62		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		60	<	IN	=	130	<	60		
		70	>	OUT	=	130	>	70		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

					0	0				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					0	0				

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**630**	BOUND	THRU	**673**	IN ...	**750**
	RIGHT	**20**	OUT ...	**620**		RIGHT	**52**	OUT ...	**620**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**620**	BOUND	THRU	**572**	IN ...	**630**
	RIGHT	**8**	OUT ...	**640**		RIGHT	**6**	OUT ...	**710**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**25**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**33**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **6.2%**	BOUND	THRU	**2**	**2**	RATIO **9.0%**
	RIGHT	**6**	**6**	ADT 1,600		RIGHT	**8**	**11**	ADT 1,600
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**602**	RATIO **8.2%**	BOUND	THRU	**673**	**683**	RATIO **8.7%**
	RIGHT	**20**	**20**	ADT 15,400		RIGHT	**52**	**53**	ADT 15,400
WEST	LEFT	**17**	**18**	WEST LEG	WEST	LEFT	**38**	**39**	WEST LEG
BOUND	THRU	**572**	**591**	RATIO **7.9%**	BOUND	THRU	**572**	**580**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 15,700		RIGHT	**6**	**8**	ADT 15,700

Opening Year (2019)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014					17	9				
					v	^				
			152	<	IN =		632	<	304	
			249	>	OUT =		632	>	274	
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
PCE FACTORS BY AXLE:				<	^	>				
2: **1.5** 3: **2.0** 4+: **3.0**				2	0	20				

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008					**374**	**166**				
					v	^				
			177	<	IN =		1173	<	**197**	
			327	>	OUT =		1173	>	**311**	
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008					**3**	**3**				
					v	^				
			7	<	IN =		22	<	**8**	
			7	>	OUT =		21	>	**7**	
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**					143	64				
PHF FOR TRUCKS: **0.333**					v	^				
			70	<	IN =		453	<	78	
			127	>	OUT =		453	>	121	
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035					**613**	**273**				
					v	^				
			263	<	IN =		1517	<	**288**	
			314	>	OUT =		1517	>	**312**	
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035					**7**	**5**				
					v	^				
			14	<	IN =		38	<	**15**	
			11	>	OUT =		38	>	**11**	
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38					235	105				
PHF FOR TRUCKS: 0.333					v	^				
			105	<	IN =		589	<	114	
			123	>	OUT =		589	>	122	
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: **2035**
FACTOR = **1.00**

					92	41				
					v	^				
			35	<			<	37		
			-4	>			>	2		
					v	^				
					58	11				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

					90	40				
					v	^				
			40	<	IN =		170	<	40	
			30	>	OUT =		170	>	30	
					v	^				
					60	10				

FUTURE YEAR GROWTH: 2014 TO **2019**
5 YEARS

					20	10				
					v	^				
			10	<			<	10		
			10	>			>	10		
					v	^				
					10	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014					11	21				
					v	^				
			261	<	IN =		773	<	467	
			242	>	OUT =		773	>	262	
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
PCE FACTORS BY AXLE:				<	^	>				
2: 1.5 3: 2 4+: 3.0				0	0	3				

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008					**346**	**524**				
					v	^				
			490	<	IN =		2005	<	**500**	
			446	>	OUT =		2004	>	**450**	
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008					**5**	**5**				
					v	^				
			9	<	IN =		36	<	**9**	
			16	>	OUT =		36	>	**16**	
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**					98	148				
PHF FOR TRUCKS: **0.25**					v	^				
			139	<	IN =		570	<	142	
			129	>	OUT =		570	>	130	
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035					**537**	**783**				
					v	^				
			673	<	IN =		2578	<	**540**	
			509	>	OUT =		2578	>	**483**	
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035					**7**	**7**				
					v	^				
			23	<	IN =		64	<	**23**	
			25	>	OUT =		63	>	**25**	
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28					152	221				
PHF FOR TRUCKS: 0.25					v	^				
			194	<	IN =		738	<	157	
			149	>	OUT =		738	>	141	
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

					54	73				
					v	^				
			55	<			<	15		
			20	>			>	11		
					v	^				
					28	79				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

					50	70				
					v	^				
			50	<	IN =		210	<	50	
			30	>	OUT =		180	>	30	
					v	^				
					30	80				

FUTURE YEAR GROWTH: 2014 TO 2019
5 YEARS

					10	10				
					v	^				
			10	<			<	10		
			10	>			>	10		
					v	^				
					10	10				

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**80**	BOUND	THRU	**5**	IN ...	**70**
	RIGHT	**65**	OUT ...	**250**		RIGHT	**37**	OUT ...	**270**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**40**	BOUND	THRU	**3**	IN ...	**20**
	RIGHT	**0**	OUT ...	**20**		RIGHT	**1**	OUT ...	**30**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**320**	BOUND	THRU	**264**	IN ...	**300**
	RIGHT	**30**	OUT ...	**230**		RIGHT	**21**	OUT ...	**300**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**420**	BOUND	THRU	**279**	IN ...	**540**
	RIGHT	**7**	OUT ...	**360**		RIGHT	**14**	OUT ...	**320**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**16**	NORTH LEG	NORTH	LEFT	**14**	**19**	NORTH LEG
BOUND	THRU	**3**	**4**	RATIO **8.6%**	BOUND	THRU	**5**	**9**	RATIO **7.1%**
	RIGHT	**65**	**65**	ADT 700		RIGHT	**37**	**42**	ADT 700
SOUTH	LEFT	**5**	**12**	SOUTH LEG	SOUTH	LEFT	**7**	**12**	SOUTH LEG
BOUND	THRU	**12**	**28**	RATIO **8.8%**	BOUND	THRU	**3**	**6**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 3,900		RIGHT	**1**	**2**	ADT 3,900
EAST	LEFT	**3**	**5**	EAST LEG	EAST	LEFT	**2**	**3**	EAST LEG
BOUND	THRU	**277**	**277**	RATIO **7.9%**	BOUND	THRU	**264**	**267**	RATIO **8.7%**
	RIGHT	**30**	**30**	ADT 9,900		RIGHT	**21**	**25**	ADT 9,900
WEST	LEFT	**202**	**202**	WEST LEG	WEST	LEFT	**240**	**242**	WEST LEG
BOUND	THRU	**202**	**215**	RATIO **7.9%**	BOUND	THRU	**279**	**279**	RATIO **8.6%**
	RIGHT	**7**	**11**	ADT 6,900		RIGHT	**14**	**18**	ADT 6,900

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
			15	^				^	24	
			245	>				<	249	
			36	v				v	14	
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
			297	<	IN	=	686	<	287	
			296	>	OUT	=	686	>	292	
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
			2	^				^	7	
			54	>				<	158	
			2	v				v	12	
					<	^	>			
					9	0	5			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
			17	^				^	31	
			299	>				<	407	
			38	v				v	26	
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			197	<	IN	=	510	<	**197**	
			311	>	OUT	=	511	>	**314**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			8	<	IN	=	17	<	**8**	
			7	>	OUT	=	18	>	**10**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
			78	<	IN	=	199	<	78	
			121	>	OUT	=	200	>	123	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			290	<	IN	=	646	<	**290**	
			354	>	OUT	=	646	>	**356**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
			15	<	IN	=	27	<	**15**	
			11	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
			115	<	IN	=	254	<	115	
			138	>	OUT	=	255	>	140	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						0	0			
						v	^			
			38	<				<	38	
			18	>				>	17	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						0	10			
						v	^			
			50	<	IN	=	90	<	50	
			40	>	OUT	=	100	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2019**

5 YEARS

						0	0			
						v	^			
			10	<				<	10	
			10	>				>	10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
			28	^				^	83	
			224	>				<	404	
			33	v				v	50	
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
			506	<	IN	=	1083	<	537	
			285	>	OUT	=	1083	>	323	
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
			2	^				^	7	
			33	>				<	46	
			3	v				v	6	
					<	^	>			
					14	3	6			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
			30	^				^	90	
			257	>				<	450	
			36	v				v	56	
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			500	<	IN	=	952	<	**500**	
			450	>	OUT	=	954	>	**454**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			9	<	IN	=	27	<	**9**	
			16	>	OUT	=	29	>	**20**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
			142	<	IN	=	273	<	142	
			130	>	OUT	=	274	>	132	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			616	<	IN	=	1138	<	**616**	
			520	>	OUT	=	1140	>	**524**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**0**			
						v	^			
			23	<	IN	=	51	<	**23**	
			26	>	OUT	=	52	>	**29**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
			178	<	IN	=	331	<	178	
			152	>	OUT	=	332	>	154	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						0	0			
						v	^			
			36	<				<	36	
			22	>				>	22	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						10	10			
						v	^			
			60	<	IN	=	100	<	60	
			30	>	OUT	=	110	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2019

5 YEARS

						0	0			
						v	^			
			10	<				<	10	
			10	>				>	10	
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**360**	BOUND	THRU	**257**	IN ...	**330**
	RIGHT	**38**	OUT ...	**470**		RIGHT	**36**	OUT ...	**580**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**470**	BOUND	THRU	**450**	IN ...	**610**
	RIGHT	**31**	OUT ...	**370**		RIGHT	**90**	OUT ...	**370**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**41**	NORTH LEG	NORTH	LEFT	**89**	**90**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.0%**	BOUND	THRU	**27**	**27**	RATIO **8.4%**
	RIGHT	**43**	**43**	ADT 2,900		RIGHT	**81**	**82**	ADT 2,900
SOUTH	LEFT	**14**	**14**	SOUTH LEG	SOUTH	LEFT	**26**	**26**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.0%**	BOUND	THRU	**38**	**39**	RATIO **8.5%**
	RIGHT	**17**	**17**	ADT 3,900		RIGHT	**29**	**30**	ADT 3,900
EAST	LEFT	**17**	**17**	EAST LEG	EAST	LEFT	**30**	**31**	EAST LEG
BOUND	THRU	**299**	**310**	RATIO **7.4%**	BOUND	THRU	**257**	**263**	RATIO **8.7%**
	RIGHT	**38**	**39**	ADT 11,300		RIGHT	**36**	**37**	ADT 11,300
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**57**	WEST LEG
BOUND	THRU	**407**	**416**	RATIO **8.1%**	BOUND	THRU	**450**	**461**	RATIO **8.8%**
	RIGHT	**31**	**32**	ADT 10,400		RIGHT	**90**	**92**	ADT 10,400

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	86	94			
					<	v	>			
			39	^				^		29
			214	>				<		300
			32	v				v		122
					<	^	>			
					52	92	101			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						257	160			
						v	^			
			429	<	IN	=	1238	<		451
			285	>	OUT	=	1238	>		409
						v	^			
						240	245			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					13	5	20			
					<	v	>			
			9	^				^		3
			56	>				<		68
			8	v				v		5
					<	^	>			
					15	20	18			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					90	91	114			
					<	v	>			
			48	^				^		32
			270	>				<		368
			40	v				v		127
					<	^	>			
					67	112	119			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						720	**305**			
						v	^			
			197	<	IN	=	2198	<		**793**
			314	>	OUT	=	2197	>		**502**
						v	^			
						1193	**371**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						7	**10**			
						v	^			
			8	<	IN	=	41	<		**13**
			10	>	OUT	=	40	>		**12**
						v	^			
						10	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						276	119			
						v	^			
			78	<	IN	=	849	<		306
			123	>	OUT	=	848	>		195
						v	^			
						457	145			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						674	**289**			
						v	^			
			290	<	IN	=	2869	<		**1412**
			356	>	OUT	=	2867	>		**586**
						v	^			
						1702	**427**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						11	**8**			
						v	^			
			15	<	IN	=	71	<		**35**
			14	>	OUT	=	69	>		**17**
						v	^			
						29	**11**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						260	112			
						v	^			
			115	<	IN	=	1114	<		548
			140	>	OUT	=	1112	>		228
						v	^			
						656	166			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						-16	-7			
						v	^			
			38	<				<		243
			17	>				>		34
						v	^			
						200	21			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
			50	<	IN	=	330	<		240
			40	>	OUT	=	320	>		50
						v	^			
						200	20			

FUTURE YEAR GROWTH: 2014 TO **2019**

5 YEARS

						10	0			
						v	^			
			10	<				<		40
			10	>				>		10
						v	^			
						40	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					95	87	111			
					<	v	>			
			83	^				^		45
			270	>				<		363
			36	v				v		99
					<	^	>			
					106	145	171			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						293	273			
						v	^			
			564	<	IN	=	1611	<		507
			389	>	OUT	=	1611	>		552
						v	^			
						222	422			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					12	4	7			
					<	v	>			
			2	^				^		10
			40	>				<		50
			0	v				v		9
					<	^	>			
					5	14	17			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					107	91	118			
					<	v	>			
			85	^				^		55
			310	>				<		413
			36	v				v		108
					<	^	>			
					111	159	188			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						588	**830**			
						v	^			
			500	<	IN	=	3381	<		**945**
			454	>	OUT	=	3378	>		**1212**
						v	^			
						836	**1394**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						12	**10**			
						v	^			
			9	<	IN	=	61	<		**18**
			20	>	OUT	=	58	>		**21**
						v	^			
						18	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						168	235			
						v	^			
			142	<	IN	=	962	<		269
			132	>	OUT	=	960	>		345
						v	^			
						239	393			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						541	**809**			
						v	^			
			616	<	IN	=	4205	<		**1204**
			524	>	OUT	=	4204	>		**1782**
						v	^			
						997	**1936**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						12	**16**			
						v	^			
			23	<	IN	=	113	<		**42**
			29	>	OUT	=	110	>		**43**
						v	^			
						28	**30**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						154	231			
						v	^			
			178	<	IN	=	1206	<		348
			154	>	OUT	=	1205	>		510
						v	^			
						286	550			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						-13	-4			
						v	^			
			36	<				<		79
			22	>				>		165
						v	^			
						48	157			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	30			
						v	^			
			60	<	IN	=	310	<		80
			40	>	OUT	=	310	>		170
						v	^			
						50	160			

FUTURE YEAR GROWTH: 2014 TO 2019

5 YEARS

						10	10			
						v	^			
			10	<				<		10
			10	>				>		30
						v	^			
						10	30			

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**300**	BOUND	THRU	**159**	IN ...	**490**
	RIGHT	**119**	OUT ...	**300**		RIGHT	**188**	OUT ...	**250**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**310**	BOUND	THRU	**91**	IN ...	**330**
	RIGHT	**90**	OUT ...	**190**		RIGHT	**107**	OUT ...	**310**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**370**	BOUND	THRU	**310**	IN ...	**440**
	RIGHT	**40**	OUT ...	**540**		RIGHT	**36**	OUT ...	**640**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**570**	BOUND	THRU	**413**	IN ...	**590**
	RIGHT	**32**	OUT ...	**510**		RIGHT	**55**	OUT ...	**650**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**67**	NORTH LEG	NORTH	LEFT	**111**	**115**	NORTH LEG
BOUND	THRU	**112**	**113**	RATIO **6.9%**	BOUND	THRU	**159**	**169**	RATIO **8.8%**
	RIGHT	**119**	**121**	ADT 7,300		RIGHT	**188**	**206**	ADT 7,300
SOUTH	LEFT	**114**	**115**	SOUTH LEG	SOUTH	LEFT	**118**	**125**	SOUTH LEG
BOUND	THRU	**91**	**103**	RATIO **7.2%**	BOUND	THRU	**91**	**97**	RATIO **8.9%**
	RIGHT	**90**	**92**	ADT 8,300		RIGHT	**107**	**108**	ADT 8,300
EAST	LEFT	**48**	**49**	EAST LEG	EAST	LEFT	**85**	**87**	EAST LEG
BOUND	THRU	**270**	**274**	RATIO **7.6%**	BOUND	THRU	**310**	**318**	RATIO **8.7%**
	RIGHT	**40**	**46**	ADT 14,200		RIGHT	**36**	**37**	ADT 14,200
WEST	LEFT	**127**	**151**	WEST LEG	WEST	LEFT	**108**	**116**	WEST LEG
BOUND	THRU	**368**	**383**	RATIO **7.3%**	BOUND	THRU	**413**	**417**	RATIO **8.7%**
	RIGHT	**32**	**33**	ADT 12,500		RIGHT	**55**	**57**	ADT 12,500

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			58	168	13			
			<	v	>			
		21 ^				^	21	
		39 >				<	87	
		22 v				v	71	
			<	^	>			
			58	268	125			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				239	310			
				v	^			
		203 <	IN =		951	<	179	
		82 >	OUT =		951	>	177	
				v	^			
				261	451			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			6	11	4			
			<	v	>			
		11 ^				^	3	
		7 >				<	5	
		5 v				v	9	
			<	^	>			
			7	25	24			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			64	179	17			
			<	v	>			
		32 ^				^	24	
		46 >				<	92	
		27 v				v	80	
			<	^	>			
			65	293	149			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				1193	**371**			
				v	^			
		694 <	IN =		1564	<	**0**	
		76 >	OUT =		1564	>	**0**	
				v	^			
				499	**295**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				10	**11**			
				v	^			
		0 <	IN =		20	<	**0**	
		0 >	OUT =		21	>	**0**	
				v	^			
				10	**10**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				457	145			
				v	^			
		264 <	IN =		601	<	0	
		29 >	OUT =		601	>	0	
				v	^			
				193	115			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				1702	**427**			
				v	^			
		754 <	IN =		2129	<	**0**	
		97 >	OUT =		2129	>	**0**	
				v	^			
				948	**330**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				29	**11**			
				v	^			
		1 <	IN =		40	<	**0**	
		1 >	OUT =		40	>	**0**	
				v	^			
				28	**10**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				656	166			
				v	^			
		287 <	IN =		822	<	0	
		37 >	OUT =		822	>	0	
				v	^			
				370	129			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				200	21			
				v	^			
		23 <				<	0	
		8 >				>	0	
				v	^			
				177	13			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				200	30			
				v	^			
		20 <	IN =		240	<	20	
		10 >	OUT =		250	>	20	
				v	^			
				180	10			

FUTURE YEAR GROWTH: 2014 TO **2019**

5 YEARS

				40	10			
				v	^			
		0 <				<	0	
		0 >				>	0	
				v	^			
				30	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			90	92	14			
			<	v	>			
		28 ^				^	30	
		35 >				<	50	
		19 v				v	51	
			<	^	>			
			54	359	193			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				196	417			
				v	^			
		194 <	IN =		1015	<	131	
		82 >	OUT =		1015	>	242	
				v	^			
				162	606			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			5	5	2			
			<	v	>			
		0 ^				^	3	
		2 >				<	2	
		0 v				v	0	
			<	^	>			
			2	46	30			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			95	97	16			
			<	v	>			
		28 ^				^	33	
		37 >				<	52	
		19 v				v	51	
			<	^	>			
			56	405	223			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				836	**1394**			
				v	^			
		178 <	IN =		2229	<	**0**	
		677 >	OUT =		2230	>	**0**	
				v	^			
				658	**716**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				18	**11**			
				v	^			
		1 <	IN =		30	<	**0**	
		1 >	OUT =		29	>	**0**	
				v	^			
				17	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				239	393			
				v	^			
		50 <	IN =		632	<	0	
		190 >	OUT =		632	>	0	
				v	^			
				188	203			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				997	**1936**			
				v	^			
		212 <	IN =		2933	<	**0**	
		745 >	OUT =		2933	>	**0**	
				v	^			
				785	**1191**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				28	**30**			
				v	^			
		1 <	IN =		58	<	**0**	
		1 >	OUT =		58	>	**0**	
				v	^			
				27	**29**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				286	550			
				v	^			
		60 <	IN =		836	<	0	
		209 >	OUT =		836	>	0	
				v	^			
				227	341			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				48	157			
				v	^			
		10 <				<	0	
		19 >				>	0	
				v	^			
				38	138			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				50	160			
				v	^			
		20 <	IN =		220	<	10	
		20 >	OUT =		250	>	30	
				v	^			
				40	140			

FUTURE YEAR GROWTH: 2014 TO 2019

5 YEARS

				10	30			
				v	^			
		0 <				<	0	
		0 >				>	10	
				v	^			
				10	30			

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**720**
	RIGHT	**149**	OUT ...	**320**		RIGHT	**223**	OUT ...	**180**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**300**	BOUND	THRU	**97**	IN ...	**220**
	RIGHT	**64**	OUT ...	**360**		RIGHT	**95**	OUT ...	**500**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**80**
	RIGHT	**27**	OUT ...	**220**		RIGHT	**19**	OUT ...	**200**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**200**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**210**		RIGHT	**33**	OUT ...	**290**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**65**	NORTH LEG	NORTH	LEFT	**56**	**56**	NORTH LEG
BOUND	THRU	**293**	**300**	RATIO **8.1%**	BOUND	THRU	**405**	**436**	RATIO **8.9%**
	RIGHT	**149**	**150**	ADT 8,100		RIGHT	**223**	**237**	ADT 8,100
SOUTH	LEFT	**17**	**19**	SOUTH LEG	SOUTH	LEFT	**16**	**18**	SOUTH LEG
BOUND	THRU	**179**	**208**	RATIO **8.3%**	BOUND	THRU	**97**	**108**	RATIO **9.0%**
	RIGHT	**64**	**70**	ADT 10,100		RIGHT	**95**	**96**	ADT 10,100
EAST	LEFT	**32**	**34**	EAST LEG	EAST	LEFT	**28**	**29**	EAST LEG
BOUND	THRU	**46**	**47**	RATIO **8.7%**	BOUND	THRU	**37**	**38**	RATIO **9.1%**
	RIGHT	**27**	**28**	ADT 4,800		RIGHT	**19**	**19**	ADT 4,800
WEST	LEFT	**80**	**83**	WEST LEG	WEST	LEFT	**51**	**54**	WEST LEG
BOUND	THRU	**92**	**93**	RATIO **9.9%**	BOUND	THRU	**52**	**53**	RATIO **8.6%**
	RIGHT	**24**	**26**	ADT 3,400		RIGHT	**33**	**36**	ADT 3,400

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		402	>				<	575
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1		
					v	^		
		578	<	IN =		1001	<	586
		404	>	OUT =		1001	>	410
					v	^		
					12	9		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		64	>				<	52
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		466	>				<	627
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		793	<	IN =		1295	<	**793**
		502	>	OUT =		1295	>	**502**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		13	<	IN =		25	<	**13**
		12	>	OUT =		25	>	**12**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		306	<	IN =		500	<	306
		195	>	OUT =		500	>	195
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1412	<	IN =		1998	<	**1412**
		586	>	OUT =		1998	>	**586**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		35	<	IN =		52	<	**35**
		17	>	OUT =		52	>	**17**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		548	<	IN =		777	<	548
		228	>	OUT =		777	>	228
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					v	^		
		243	<				<	243
		34	>				>	34
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		240	<	IN =		290	<	240
		50	>	OUT =		290	>	50
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO **2019**

3 YEARS

					0	0		
					v	^		
		30	<				<	30
		10	>				>	10
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		637	>				<	524
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5		
					v	^		
		536	<	IN =		1206	<	540
		642	>	OUT =		1206	>	649
					v	^		
					16	17		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		61	>				<	24
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		698	>				<	548
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		945	<	IN =		2157	<	**945**
		1212	>	OUT =		2157	>	**1212**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		18	<	IN =		39	<	**18**
		21	>	OUT =		39	>	**21**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		269	<	IN =		614	<	269
		345	>	OUT =		614	>	345
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1204	<	IN =		2986	<	**1204**
		1782	>	OUT =		2986	>	**1782**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		42	<	IN =		85	<	**42**
		43	>	OUT =		85	>	**43**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		348	<	IN =		857	<	348
		510	>	OUT =		857	>	510
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					v	^		
		79	<				<	79
		165	>				>	165
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		80	<	IN =		250	<	80
		170	>	OUT =		250	>	170
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO 2019

3 YEARS

					0	0		
					v	^		
		10	<				<	10
		20	>				>	20
					v	^		
					0	0		

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**480**	BOUND	THRU	**698**	IN ...	**730**
	RIGHT	**2**	OUT ...	**670**		RIGHT	**2**	OUT ...	**570**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**670**	BOUND	THRU	**548**	IN ...	**570**
	RIGHT	**1**	OUT ...	**480**		RIGHT	**2**	OUT ...	**730**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**474**	RATIO **8.3%**	BOUND	THRU	**698**	**715**	RATIO **9.3%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**666**	RATIO **8.2%**	BOUND	THRU	**548**	**554**	RATIO **9.2%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2019**

5 YEARS

				0	0			
				v	^			
			40 <		<	40		
			10 >		>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2019

5 YEARS

				0	0			
				v	^			
			10 <		<	10		
			30 >		>	30		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**650**
	RIGHT	**0**	OUT ...	**580**		RIGHT	**0**	OUT ...	**580**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**580**	BOUND	THRU	**568**	IN ...	**580**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**650**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.1%**	BOUND	THRU	**621**	**650**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,200		RIGHT	**0**	**0**	ADT 14,200
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**580**	RATIO **7.1%**	BOUND	THRU	**568**	**580**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,200		RIGHT	**0**	**0**	ADT 14,200

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <		419	
			359 >	OUT =	778 >		359	
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <		**793**	
			502 >	OUT =	1295 >		**502**	
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <		**13**	
			12 >	OUT =	25 >		**12**	
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <		306	
			195 >	OUT =	500 >		195	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <		**1412**	
			586 >	OUT =	1998 >		**586**	
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <		**35**	
			17 >	OUT =	52 >		**17**	
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <		548	
			228 >	OUT =	777 >		228	
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<		243	
			34 >		>		34	
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <		240	
			40 >	OUT =	280 >		40	
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2019**

5 YEARS

				0	0			
				v	^			
			40 <		<		40	
			10 >		>		10	
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <		510	
			567 >	OUT =	1077 >		567	
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <		**945**	
			1212 >	OUT =	2157 >		**1212**	
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <		**18**	
			21 >	OUT =	39 >		**21**	
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <		269	
			345 >	OUT =	614 >		345	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <		**1204**	
			1782 >	OUT =	2986 >		**1782**	
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <		**42**	
			43 >	OUT =	85 >		**43**	
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <		348	
			510 >	OUT =	857 >		510	
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<		79	
			165 >		>		165	
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <		80	
			170 >	OUT =	250 >		170	
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2019

5 YEARS

				0	0			
				v	^			
			10 <		<		10	
			30 >		>		30	
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**650**
	RIGHT	**0**	OUT ...	**580**		RIGHT	**0**	OUT ...	**580**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**580**	BOUND	THRU	**568**	IN ...	**580**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**650**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.1%**	BOUND	THRU	**621**	**650**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,200		RIGHT	**0**	**0**	ADT 14,200
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**580**	RATIO **7.1%**	BOUND	THRU	**568**	**580**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,200		RIGHT	**0**	**0**	ADT 14,200

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					14	2	9			
					<	v	>			
		19	^					^	11	
		324	>					<	400	
		16	v					v	11	
					<	^	>			
					5	1	18			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						25	31			
						v	^			
				419	<	IN	=	830	<	422
				359	>	OUT	=	830	>	351
						v	^			
						29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	0	2			
					<	v	>			
		0	^					^	3	
		63	>					<	116	
		2	v					v	0	
					<	^	>			
					2	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					22	2	11			
					<	v	>			
		19	^					^	14	
		387	>					<	516	
		18	v					v	11	
					<	^	>			
					7	1	18			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						53	**81**			
						v	^			
				793	<	IN	=	1721	<	**983**
				502	>	OUT	=	1720	>	**669**
						v	^			
						177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				13	<	IN	=	28	<	**14**
				12	>	OUT	=	28	>	**13**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						20	31			
						v	^			
				306	<	IN	=	663	<	378
				195	>	OUT	=	663	>	259
						v	^			
						68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						141	**129**			
						v	^			
				1412	<	IN	=	2632	<	**1678**
				586	>	OUT	=	2632	>	**735**
						v	^			
						356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						1	**1**			
						v	^			
				35	<	IN	=	60	<	**38**
				17	>	OUT	=	60	>	**20**
						v	^			
						4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						54	49			
						v	^			
				548	<	IN	=	1020	<	650
				228	>	OUT	=	1020	>	286
						v	^			
						137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						34	19			
						v	^			
				243	<			<	272	
				34	>			>	27	
						v	^			
						69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
				240	<	IN	=	360	<	270
				40	>	OUT	=	370	>	40
						v	^			
						70	20			

FUTURE YEAR GROWTH: 2014 TO **2019**

5 YEARS

						10	0			
						v	^			
				40	<			<	50	
				10	>			>	10	
						v	^			
						10	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					16	0	10			
					<	v	>			
		26	^					^	15	
		529	>					<	488	
		12	v					v	18	
					<	^	>			
					6	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						26	41			
						v	^			
				510	<	IN	=	1129	<	521
				567	>	OUT	=	1129	>	548
						v	^			
						30	15			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	0	7			
					<	v	>			
		8	^					^	3	
		46	>					<	52	
		0	v					v	0	
					<	^	>			
					5	0	2			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					18	0	17			
					<	v	>			
		34	^					^	18	
		575	>					<	540	
		12	v					v	18	
					<	^	>			
					11	0	11			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						125	**83**			
						v	^			
				945	<	IN	=	2793	<	**1206**
				1212	>	OUT	=	2793	>	**1471**
						v	^			
						294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				18	<	IN	=	43	<	**20**
				21	>	OUT	=	44	>	**24**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						35	23			
						v	^			
				269	<	IN	=	793	<	343
				345	>	OUT	=	793	>	418
						v	^			
						83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						232	**246**			
						v	^			
				1204	<	IN	=	4038	<	**1441**
				1782	>	OUT	=	4038	>	**2154**
						v	^			
						434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**2**			
						v	^			
				42	<	IN	=	97	<	**46**
				43	>	OUT	=	98	>	**48**
						v	^			
						6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						65	69			
						v	^			
				348	<	IN	=	1155	<	415
				510	>	OUT	=	1155	>	615
						v	^			
						123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						30	46			
						v	^			
				79	<			<	72	
				165	>			>	197	
						v	^			
						40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	50			
						v	^			
				80	<	IN	=	360	<	70
				170	>	OUT	=	370	>	200
						v	^			
						40	90			

FUTURE YEAR GROWTH: 2014 TO 2019

5 YEARS

						10	10			
						v	^			
				10	<			<	10	
				30	>			>	40	
						v	^			
						10	20			

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**30**	BOUND	THRU	**0**	IN ...	**40**
	RIGHT	**18**	OUT ...	**40**		RIGHT	**11**	OUT ...	**40**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**22**	OUT ...	**30**		RIGHT	**18**	OUT ...	**60**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**430**	BOUND	THRU	**575**	IN ...	**650**
	RIGHT	**18**	OUT ...	**600**		RIGHT	**12**	OUT ...	**580**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**590**	BOUND	THRU	**540**	IN ...	**590**
	RIGHT	**14**	OUT ...	**430**		RIGHT	**18**	OUT ...	**640**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**8**	NORTH LEG	NORTH	LEFT	**11**	**19**	NORTH LEG
BOUND	THRU	**1**	**1**	RATIO **7.6%**	BOUND	THRU	**0**	**0**	RATIO **9.9%**
	RIGHT	**18**	**21**	ADT 1,100		RIGHT	**11**	**21**	ADT 1,100
SOUTH	LEFT	**11**	**16**	SOUTH LEG	SOUTH	LEFT	**17**	**25**	SOUTH LEG
BOUND	THRU	**2**	**3**	RATIO **7.8%**	BOUND	THRU	**0**	**0**	RATIO **8.9%**
	RIGHT	**22**	**31**	ADT 900		RIGHT	**18**	**24**	ADT 900
EAST	LEFT	**19**	**19**	EAST LEG	EAST	LEFT	**34**	**38**	EAST LEG
BOUND	THRU	**387**	**393**	RATIO **7.2%**	BOUND	THRU	**575**	**594**	RATIO **8.7%**
	RIGHT	**18**	**22**	ADT 14,200		RIGHT	**12**	**15**	ADT 14,200
WEST	LEFT	**11**	**15**	WEST LEG	WEST	LEFT	**18**	**25**	WEST LEG
BOUND	THRU	**516**	**561**	RATIO **7.3%**	BOUND	THRU	**540**	**545**	RATIO **8.7%**
	RIGHT	**14**	**14**	ADT 14,200		RIGHT	**18**	**22**	ADT 14,200

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

0 29 0
< v >
0 ^ ^ 0
0 > < 0
0 v v 0
< ^ >
0 24 0

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

29 24
v ^
0 < IN = 53 < 0
0 > OUT = 53 > 0
v ^
29 24

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

0 2 0
< v >
0 ^ ^ 0
0 > < 0
0 v v 0
PCE FACTORS BY AXLE: < ^ >
2: **1.5** 3: **2.0** 4+: **3.0** 0 2 0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

0 31 0
< v >
0 ^ ^ 0
0 > < 0
0 v v 0
< ^ >
0 26 0

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

177 **183**
v ^
< IN = 360 <
> OUT = 360 >
v ^
177 **183**

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

2 **2**
v ^
< IN = 4 <
> OUT = 4 >
v ^
2 **2**

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**
PHF FOR TRUCKS: **0.333**

68 70
v ^
0 < IN = 138 < 0
0 > OUT = 138 > 0
v ^
68 70

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

356 **227**
v ^
< IN = 583 <
> OUT = 583 >
v ^
356 **227**

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

4 **4**
v ^
< IN = 8 <
> OUT = 8 >
v ^
4 **4**

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

137 88
v ^
0 < IN = 224 < 0
0 > OUT = 224 > 0
v ^
137 88

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: **2035**
FACTOR = **1.00**

69 17
v ^
0 < < 0
0 > > 0
v ^
69 17

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

70 20
v ^
0 < IN = 90 < 0
0 > OUT = 90 > 0
v ^
70 20

FUTURE YEAR GROWTH: 2014 TO **2019**
5 YEARS

10 0
v ^
0 < < 0
0 > > 0
v ^
10 0

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

0 29 0
< v >
0 ^ ^ 0
0 > < 0
0 v v 0
< ^ >
0 19 0

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

29 19
v ^
0 < IN = 48 < 0
0 > OUT = 48 > 0
v ^
29 19

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

0 0 0
< v >
0 ^ ^ 0
0 > < 0
0 v v 0
PCE FACTORS BY AXLE: < ^ >
2: 1.5 3: 2 4+: 3.0 0 5 0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

0 29 0
< v >
0 ^ ^ 0
0 > < 0
0 v v 0
< ^ >
0 24 0

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

294 **250**
v ^
< IN = 544 <
> OUT = 544 >
v ^
294 **250**

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

2 **2**
v ^
< IN = 4 <
> OUT = 4 >
v ^
2 **2**

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**
PHF FOR TRUCKS: **0.25**

83 71
v ^
0 < IN = 153 < 0
0 > OUT = 153 > 0
v ^
83 71

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

434 **583**
v ^
< IN = 1017 <
> OUT = 1017 >
v ^
434 **583**

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

6 **6**
v ^
< IN = 12 <
> OUT = 12 >
v ^
6 **6**

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

123 165
v ^
0 < IN = 288 < 0
0 > OUT = 288 > 0
v ^
123 165

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

40 94
v ^
0 < < 0
0 > > 0
v ^
40 94

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

40 90
v ^
0 < IN = 130 < 0
0 > OUT = 130 > 0
v ^
40 90

FUTURE YEAR GROWTH: 2014 TO 2019
5 YEARS

10 20
v ^
0 < < 0
0 > > 0
v ^
10 20

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**40**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**40**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **7.8%**	BOUND	THRU	**24**	**40**	RATIO **8.9%**
	RIGHT	**0**	**0**	ADT 900		RIGHT	**0**	**0**	ADT 900
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**40**	RATIO **7.8%**	BOUND	THRU	**29**	**40**	RATIO **8.9%**
	RIGHT	**0**	**0**	ADT 900		RIGHT	**0**	**0**	ADT 900
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: S Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	24	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24				
					v	^				
		0	<	IN =		53	<			0
		0	>	OUT =		53	>			0
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	2	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	26	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**				
					v	^				
			<	IN =		360	<			
			>	OUT =		360	>			
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70				
					v	^				
		0	<	IN =		138	<			0
		0	>	OUT =		138	>			0
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**				
					v	^				
			<	IN =		583	<			
			>	OUT =		583	>			
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**				
					v	^				
			<	IN =		8	<			
			>	OUT =		8	>			
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88				
					v	^				
		0	<	IN =		224	<			0
		0	>	OUT =		224	>			0
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20				
					v	^				
		0	<	IN =		90	<			0
		0	>	OUT =		90	>			0
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2017**

3 YEARS

					10	0				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					10	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	19	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19				
					v	^				
		0	<	IN =		48	<			0
		0	>	OUT =		48	>			0
					v	^				
					29	19				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	5	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	24	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**				
					v	^				
			<	IN =		544	<			
			>	OUT =		544	>			
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71				
					v	^				
		0	<	IN =		153	<			0
		0	>	OUT =		153	>			0
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**				
					v	^				
			<	IN =		1017	<			
			>	OUT =		1017	>			
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**				
					v	^				
			<	IN =		12	<			
			>	OUT =		12	>			
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165				
					v	^				
		0	<	IN =		288	<			0
		0	>	OUT =		288	>			0
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90				
					v	^				
		0	<	IN =		130	<			0
		0	>	OUT =		130	>			0
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2017

3 YEARS

					0	10				
					v	^				
		0	<				<			0
		0	>				>			0
					v	^				
					0	10				

Valle Vista Road (NS) at: S Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**30**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**30**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**40**	BOUND	THRU	**29**	IN ...	**30**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**30**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2017) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **8.8%**	BOUND	THRU	**24**	**30**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**40**	RATIO **8.8%**	BOUND	THRU	**29**	**30**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 800		RIGHT	**0**	**0**	ADT 800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
PCE FACTORS BY AXLE:					<	^	>			
2: **1.5** 3: **2.0** 4+: **3.0**					0	2	21			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**
PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: **2035**
FACTOR = **1.00**

						94	31			
						v	^			
			272	<			<		162	
			27	>			>		-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2019**
5 YEARS

						20	10			
						v	^			
			50	<			<		30	
			10	>			>		10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
PCE FACTORS BY AXLE:					<	^	>			
2: 1.5 3: 2 4+: 3.0					3	10	15			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**
PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

						43	110			
						v	^			
			72	<			<		4	
			197	>			>		62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2019
5 YEARS

						10	20			
						v	^			
			10	<			<		10	
			40	>			>		10	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**200**	BOUND	THRU	**30**	IN ...	**140**
	RIGHT	**85**	OUT ...	**90**		RIGHT	**46**	OUT ...	**230**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**400**	BOUND	THRU	**485**	IN ...	**640**
	RIGHT	**8**	OUT ...	**570**		RIGHT	**12**	OUT ...	**520**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**590**	BOUND	THRU	**445**	IN ...	**600**
	RIGHT	**32**	OUT ...	**600**		RIGHT	**59**	OUT ...	**750**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**10**	NORTH LEG	NORTH	LEFT	**18**	**19**	NORTH LEG
BOUND	THRU	**15**	**16**	RATIO **6.9%**	BOUND	THRU	**50**	**54**	RATIO **8.8%**
	RIGHT	**190**	**192**	ADT 4,200		RIGHT	**193**	**195**	ADT 4,200
SOUTH	LEFT	**60**	**62**	SOUTH LEG	SOUTH	LEFT	**58**	**59**	SOUTH LEG
BOUND	THRU	**38**	**39**	RATIO **8.1%**	BOUND	THRU	**30**	**32**	RATIO **8.7%**
	RIGHT	**85**	**100**	ADT 4,600		RIGHT	**46**	**50**	ADT 4,600
EAST	LEFT	**36**	**41**	EAST LEG	EAST	LEFT	**98**	**115**	EAST LEG
BOUND	THRU	**344**	**353**	RATIO **7.8%**	BOUND	THRU	**485**	**507**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 15,600		RIGHT	**12**	**14**	ADT 15,600
WEST	LEFT	**108**	**109**	WEST LEG	WEST	LEFT	**84**	**84**	WEST LEG
BOUND	THRU	**421**	**460**	RATIO **7.3%**	BOUND	THRU	**445**	**451**	RATIO **8.7%**
	RIGHT	**32**	**33**	ADT 13,300		RIGHT	**59**	**61**	ADT 13,300

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6				
				<	v	>				
		4	^				^	5		
		509	>				<	483		
		16	v				v	15		
				<	^	>				
				25	2	29				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11				
					v	^				
		514	<	IN	=	1101	<	503		
		529	>	OUT	=	1101	>	544		
					v	^				
					32	56				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	3		
		82	>				<	89		
		4	v				v	2		
				<	^	>				
				0	0	4				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6				
				<	v	>				
		4	^				^	8		
		591	>				<	572		
		20	v				v	17		
				<	^	>				
				25	2	33				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		997	<	IN	=	1768	<	**997**		
		771	>	OUT	=	1768	>	**771**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		14	<	IN	=	28	<	**14**		
		14	>	OUT	=	28	>	**14**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
		384	<	IN	=	681	<	384		
		298	>	OUT	=	681	>	298		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1408	<	IN	=	2121	<	**1408**		
		713	>	OUT	=	2121	>	**713**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		31	<	IN	=	48	<	**31**		
		17	>	OUT	=	48	>	**17**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
		545	<	IN	=	822	<	545		
		277	>	OUT	=	822	>	277		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
		162	<				<	162		
		-21	>				>	-21		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		160	<	IN	=	220	<	160		
		60	>	OUT	=	220	>	60		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2019**

5 YEARS

					0	0				
					v	^				
		30	<				<	30		
		10	>				>	10		
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5				
				<	v	>				
		10	^				^	4		
		589	>				<	537		
		50	v				v	33		
				<	^	>				
				26	0	15				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14				
					v	^				
		569	<	IN	=	1275	<	574		
		649	>	OUT	=	1275	>	609		
					v	^				
					83	41				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0				
				<	v	>				
		0	^				^	2		
		84	>				<	35		
		2	v				v	5		
				<	^	>				
				2	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5				
				<	v	>				
		10	^				^	6		
		673	>				<	572		
		52	v				v	38		
				<	^	>				
				28	0	18				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		1333	<	IN	=	2884	<	**1333**		
		1551	>	OUT	=	2884	>	**1551**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		21	<	IN	=	46	<	**21**		
		25	>	OUT	=	46	>	**25**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
		378	<	IN	=	819	<	378		
		441	>	OUT	=	819	>	441		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1330	<	IN	=	3088	<	**1330**		
		1758	>	OUT	=	3088	>	**1758**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		41	<	IN	=	82	<	**41**		
		41	>	OUT	=	82	>	**41**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
		383	<	IN	=	885	<	383		
		502	>	OUT	=	885	>	502		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
		4	<				<	4		
		62	>				>	62		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		60	<	IN	=	130	<	60		
		70	>	OUT	=	130	>	70		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2019

5 YEARS

					0	0				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					0	0				

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**630**	BOUND	THRU	**673**	IN ...	**750**
	RIGHT	**20**	OUT ...	**630**		RIGHT	**52**	OUT ...	**620**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**630**	BOUND	THRU	**572**	IN ...	**630**
	RIGHT	**8**	OUT ...	**640**		RIGHT	**6**	OUT ...	**710**

OPENING YEAR (2019) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**25**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**33**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **6.2%**	BOUND	THRU	**2**	**2**	RATIO **9.0%**
	RIGHT	**6**	**6**	ADT 1,600		RIGHT	**8**	**11**	ADT 1,600
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**602**	RATIO **8.2%**	BOUND	THRU	**673**	**683**	RATIO **8.6%**
	RIGHT	**20**	**20**	ADT 15,500		RIGHT	**52**	**53**	ADT 15,500
WEST	LEFT	**17**	**18**	WEST LEG	WEST	LEFT	**38**	**39**	WEST LEG
BOUND	THRU	**572**	**601**	RATIO **8.0%**	BOUND	THRU	**572**	**580**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 15,800		RIGHT	**6**	**8**	ADT 15,800

Opening Year (2020)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					17	9				
					v	^				
		152	<	IN	=	632	<	304		
		249	>	OUT	=	632	>	274		
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
				<	^	>				
				2	0	20				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					374	**166**				
					v	^				
		177	<	IN	=	1173	<	**197**		
		327	>	OUT	=	1173	>	**311**		
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					3	**3**				
					v	^				
		7	<	IN	=	22	<	**8**		
		7	>	OUT	=	21	>	**7**		
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					143	64				
					v	^				
		70	<	IN	=	453	<	78		
		127	>	OUT	=	453	>	121		
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					613	**273**				
					v	^				
		263	<	IN	=	1517	<	**288**		
		314	>	OUT	=	1517	>	**312**		
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**5**				
					v	^				
		14	<	IN	=	38	<	**15**		
		11	>	OUT	=	38	>	**11**		
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					235	105				
					v	^				
		105	<	IN	=	589	<	114		
		123	>	OUT	=	589	>	122		
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					92	41				
					v	^				
		35	<				<	37		
		-4	>				>	2		
					v	^				
					58	11				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					90	40				
					v	^				
		40	<	IN	=	170	<	40		
		30	>	OUT	=	170	>	30		
					v	^				
					60	10				

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					20	10				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					10	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	21				
					v	^				
		261	<	IN	=	773	<	467		
		242	>	OUT	=	773	>	262		
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
				<	^	>				
				0	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					346	**524**				
					v	^				
		490	<	IN	=	2005	<	**500**		
		446	>	OUT	=	2004	>	**450**		
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					5	**5**				
					v	^				
		9	<	IN	=	36	<	**9**		
		16	>	OUT	=	36	>	**16**		
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					98	148				
					v	^				
		139	<	IN	=	570	<	142		
		129	>	OUT	=	570	>	130		
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					537	**783**				
					v	^				
		673	<	IN	=	2578	<	**540**		
		509	>	OUT	=	2578	>	**483**		
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**7**				
					v	^				
		23	<	IN	=	64	<	**23**		
		25	>	OUT	=	63	>	**25**		
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					152	221				
					v	^				
		194	<	IN	=	738	<	157		
		149	>	OUT	=	738	>	141		
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					54	73				
					v	^				
		55	<				<	15		
		20	>				>	11		
					v	^				
					28	79				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	70				
					v	^				
		50	<	IN	=	210	<	50		
		30	>	OUT	=	180	>	30		
					v	^				
					30	80				

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					10	20				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					10	20				

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**80**	BOUND	THRU	**5**	IN ...	**80**
	RIGHT	**65**	OUT ...	**250**		RIGHT	**37**	OUT ...	**270**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**40**	BOUND	THRU	**3**	IN ...	**20**
	RIGHT	**0**	OUT ...	**20**		RIGHT	**1**	OUT ...	**40**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**320**	BOUND	THRU	**264**	IN ...	**300**
	RIGHT	**30**	OUT ...	**230**		RIGHT	**21**	OUT ...	**300**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**420**	BOUND	THRU	**279**	IN ...	**540**
	RIGHT	**7**	OUT ...	**360**		RIGHT	**14**	OUT ...	**320**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**16**	NORTH LEG	NORTH	LEFT	**14**	**21**	NORTH LEG
BOUND	THRU	**3**	**4**	RATIO **8.6%**	BOUND	THRU	**5**	**13**	RATIO **8.4%**
	RIGHT	**65**	**65**	ADT 700		RIGHT	**37**	**45**	ADT 700
SOUTH	LEFT	**5**	**12**	SOUTH LEG	SOUTH	LEFT	**7**	**11**	SOUTH LEG
BOUND	THRU	**12**	**28**	RATIO **8.8%**	BOUND	THRU	**3**	**6**	RATIO **9.0%**
	RIGHT	**0**	**0**	ADT 3,900		RIGHT	**1**	**2**	ADT 3,900
EAST	LEFT	**3**	**5**	EAST LEG	EAST	LEFT	**2**	**4**	EAST LEG
BOUND	THRU	**277**	**278**	RATIO **7.8%**	BOUND	THRU	**264**	**264**	RATIO **8.6%**
	RIGHT	**30**	**30**	ADT 10,000		RIGHT	**21**	**26**	ADT 10,000
WEST	LEFT	**202**	**202**	WEST LEG	WEST	LEFT	**240**	**240**	WEST LEG
BOUND	THRU	**202**	**215**	RATIO **7.9%**	BOUND	THRU	**279**	**279**	RATIO **8.6%**
	RIGHT	**7**	**11**	ADT 6,900		RIGHT	**14**	**23**	ADT 6,900

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
		15	^					^	24	
		245	>					<	249	
		36	v					v	14	
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
				297	<	IN	=	686	<	287
				296	>	OUT	=	686	>	292
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
		2	^					^	7	
		54	>					<	158	
		2	v					v	12	
					<	^	>			
					9	0	5			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
		17	^					^	31	
		299	>					<	407	
		38	v					v	26	
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	0			
						v	^			
				197	<	IN	=	510	<	**197**
				311	>	OUT	=	511	>	**314**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	0			
						v	^			
				8	<	IN	=	17	<	**8**
				7	>	OUT	=	18	>	**10**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
				78	<	IN	=	199	<	78
				121	>	OUT	=	200	>	123
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	0			
						v	^			
				290	<	IN	=	646	<	**290**
				354	>	OUT	=	646	>	**356**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
				15	<	IN	=	27	<	**15**
				11	>	OUT	=	29	>	**14**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
				115	<	IN	=	254	<	115
				138	>	OUT	=	255	>	140
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						0	0			
						v	^			
				38	<			<	38	
				18	>			>	17	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						0	10			
						v	^			
				50	<	IN	=	90	<	50
				40	>	OUT	=	100	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

						0	0			
						v	^			
				10	<			<	10	
				10	>			>	10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
		28	^					^	83	
		224	>					<	404	
		33	v					v	50	
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
				506	<	IN	=	1083	<	537
				285	>	OUT	=	1083	>	323
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
		2	^					^	7	
		33	>					<	46	
		3	v					v	6	
					<	^	>			
					14	3	6			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
		30	^					^	90	
		257	>					<	450	
		36	v					v	56	
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	0			
						v	^			
				500	<	IN	=	952	<	**500**
				450	>	OUT	=	954	>	**454**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	0			
						v	^			
				9	<	IN	=	27	<	**9**
				16	>	OUT	=	29	>	**20**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
				142	<	IN	=	273	<	142
				130	>	OUT	=	274	>	132
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	0			
						v	^			
				616	<	IN	=	1138	<	**616**
				520	>	OUT	=	1140	>	**524**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	0			
						v	^			
				23	<	IN	=	51	<	**23**
				26	>	OUT	=	52	>	**29**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
				178	<	IN	=	331	<	178
				152	>	OUT	=	332	>	154
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						0	0			
						v	^			
				36	<			<	36	
				22	>			>	22	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						10	10			
						v	^			
				60	<	IN	=	100	<	60
				30	>	OUT	=	110	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

						0	0			
						v	^			
				10	<			<	10	
				10	>			>	10	
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**360**	BOUND	THRU	**257**	IN ...	**330**
	RIGHT	**38**	OUT ...	**470**		RIGHT	**36**	OUT ...	**580**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**470**	BOUND	THRU	**450**	IN ...	**610**
	RIGHT	**31**	OUT ...	**370**		RIGHT	**90**	OUT ...	**370**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**41**	NORTH LEG	NORTH	LEFT	**89**	**90**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.0%**	BOUND	THRU	**27**	**27**	RATIO **8.5%**
	RIGHT	**43**	**43**	ADT 2,900		RIGHT	**81**	**82**	ADT 2,900
SOUTH	LEFT	**14**	**14**	SOUTH LEG	SOUTH	LEFT	**26**	**27**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.0%**	BOUND	THRU	**38**	**39**	RATIO **8.5%**
	RIGHT	**17**	**17**	ADT 3,900		RIGHT	**29**	**30**	ADT 3,900
EAST	LEFT	**17**	**17**	EAST LEG	EAST	LEFT	**30**	**31**	EAST LEG
BOUND	THRU	**299**	**310**	RATIO **7.4%**	BOUND	THRU	**257**	**263**	RATIO **8.7%**
	RIGHT	**38**	**39**	ADT 11,300		RIGHT	**36**	**37**	ADT 11,300
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**57**	WEST LEG
BOUND	THRU	**407**	**416**	RATIO **8.0%**	BOUND	THRU	**450**	**461**	RATIO **8.7%**
	RIGHT	**31**	**32**	ADT 10,500		RIGHT	**90**	**92**	ADT 10,500

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				77	86	94		
				<	v	>		
		39	^				^	29
		214	>				<	300
		32	v				v	122
				<	^	>		
				52	92	101		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					257	160		
					v	^		
		429	<	IN =	1238	<		451
		285	>	OUT =	1238	>		409
					v	^		
					240	245		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				13	5	20		
				<	v	>		
		9	^				^	3
		56	>				<	68
		8	v				v	5
				<	^	>		
				15	20	18		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				90	91	114		
				<	v	>		
		48	^				^	32
		270	>				<	368
		40	v				v	127
				<	^	>		
				67	112	119		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					720	**305**		
					v	^		
		197	<	IN =	2198	<		**793**
		314	>	OUT =	2197	>		**502**
					v	^		
					1193	**371**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					7	**10**		
					v	^		
		8	<	IN =	41	<		**13**
		10	>	OUT =	40	>		**12**
					v	^		
					10	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					276	119		
					v	^		
		78	<	IN =	849	<		306
		123	>	OUT =	848	>		195
					v	^		
					457	145		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					674	**289**		
					v	^		
		290	<	IN =	2869	<		**1412**
		356	>	OUT =	2867	>		**586**
					v	^		
					1702	**427**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					11	**8**		
					v	^		
		15	<	IN =	71	<		**35**
		14	>	OUT =	69	>		**17**
					v	^		
					29	**11**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					260	112		
					v	^		
		115	<	IN =	1114	<		548
		140	>	OUT =	1112	>		228
					v	^		
					656	166		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					-16	-7		
					v	^		
		38	<			<		243
		17	>			>		34
					v	^		
					200	21		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	20		
					v	^		
		50	<	IN =	330	<		240
		40	>	OUT =	320	>		50
					v	^		
					200	20		

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					10	0		
					v	^		
		10	<			<		50
		10	>			>		10
					v	^		
					40	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				95	87	111		
				<	v	>		
		83	^				^	45
		270	>				<	363
		36	v				v	99
				<	^	>		
				106	145	171		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					293	273		
					v	^		
		564	<	IN =	1611	<		507
		389	>	OUT =	1611	>		552
					v	^		
					222	422		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				12	4	7		
				<	v	>		
		2	^				^	10
		40	>				<	50
		0	v				v	9
				<	^	>		
				5	14	17		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				107	91	118		
				<	v	>		
		85	^				^	55
		310	>				<	413
		36	v				v	108
				<	^	>		
				111	159	188		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					588	**830**		
					v	^		
		500	<	IN =	3381	<		**945**
		454	>	OUT =	3378	>		**1212**
					v	^		
					836	**1394**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					12	**10**		
					v	^		
		9	<	IN =	61	<		**18**
		20	>	OUT =	58	>		**21**
					v	^		
					18	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					168	235		
					v	^		
		142	<	IN =	962	<		269
		132	>	OUT =	960	>		345
					v	^		
					239	393		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					541	**809**		
					v	^		
		616	<	IN =	4205	<		**1204**
		524	>	OUT =	4204	>		**1782**
					v	^		
					997	**1936**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					12	**16**		
					v	^		
		23	<	IN =	113	<		**42**
		29	>	OUT =	110	>		**43**
					v	^		
					28	**30**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					154	231		
					v	^		
		178	<	IN =	1206	<		348
		154	>	OUT =	1205	>		510
					v	^		
					286	550		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					-13	-4		
					v	^		
		36	<			<		79
		22	>			>		165
					v	^		
					48	157		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	30		
					v	^		
		60	<	IN =	310	<		80
		40	>	OUT =	310	>		170
					v	^		
					50	160		

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					10	10		
					v	^		
		10	<			<		20
		10	>			>		40
					v	^		
					10	40		

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**300**	BOUND	THRU	**159**	IN ...	**500**
	RIGHT	**119**	OUT ...	**300**		RIGHT	**188**	OUT ...	**250**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**310**	BOUND	THRU	**91**	IN ...	**330**
	RIGHT	**90**	OUT ...	**190**		RIGHT	**107**	OUT ...	**310**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**370**	BOUND	THRU	**310**	IN ...	**440**
	RIGHT	**40**	OUT ...	**550**		RIGHT	**36**	OUT ...	**640**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**580**	BOUND	THRU	**413**	IN ...	**600**
	RIGHT	**32**	OUT ...	**520**		RIGHT	**55**	OUT ...	**660**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**68**	NORTH LEG	NORTH	LEFT	**111**	**114**	NORTH LEG
BOUND	THRU	**112**	**113**	RATIO **6.9%**	BOUND	THRU	**159**	**170**	RATIO **8.8%**
	RIGHT	**119**	**123**	ADT 7,300		RIGHT	**188**	**213**	ADT 7,300
SOUTH	LEFT	**114**	**115**	SOUTH LEG	SOUTH	LEFT	**118**	**127**	SOUTH LEG
BOUND	THRU	**91**	**102**	RATIO **7.2%**	BOUND	THRU	**91**	**96**	RATIO **8.9%**
	RIGHT	**90**	**92**	ADT 8,400		RIGHT	**107**	**109**	ADT 8,400
EAST	LEFT	**48**	**49**	EAST LEG	EAST	LEFT	**85**	**87**	EAST LEG
BOUND	THRU	**270**	**279**	RATIO **7.7%**	BOUND	THRU	**310**	**319**	RATIO **8.8%**
	RIGHT	**40**	**45**	ADT 14,300		RIGHT	**36**	**36**	ADT 14,300
WEST	LEFT	**127**	**153**	WEST LEG	WEST	LEFT	**108**	**118**	WEST LEG
BOUND	THRU	**368**	**393**	RATIO **7.4%**	BOUND	THRU	**413**	**421**	RATIO **8.7%**
	RIGHT	**32**	**34**	ADT 12,500		RIGHT	**55**	**56**	ADT 12,500

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				58	168	13		
				<	v	>		
		21	^				^	21
		39	>				<	87
		22	v				v	71
				<	^	>		
				58	268	125		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					239	310		
					v	^		
		203	<	IN	=	951	<	179
		82	>	OUT	=	951	>	177
					v	^		
					261	451		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				6	11	4		
				<	v	>		
		11	^				^	3
		7	>				<	5
		5	v				v	9
				<	^	>		
				7	25	24		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				64	179	17		
				<	v	>		
		32	^				^	24
		46	>				<	92
		27	v				v	80
				<	^	>		
				65	293	149		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					1193	**371**		
					v	^		
		694	<	IN	=	1564	<	**0**
		76	>	OUT	=	1564	>	**0**
					v	^		
					499	**295**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					10	**11**		
					v	^		
		0	<	IN	=	20	<	**0**
		0	>	OUT	=	21	>	**0**
					v	^		
					10	**10**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					457	145		
					v	^		
		264	<	IN	=	601	<	0
		29	>	OUT	=	601	>	0
					v	^		
					193	115		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					1702	**427**		
					v	^		
		754	<	IN	=	2129	<	**0**
		97	>	OUT	=	2129	>	**0**
					v	^		
					948	**330**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					29	**11**		
					v	^		
		1	<	IN	=	40	<	**0**
		1	>	OUT	=	40	>	**0**
					v	^		
					28	**10**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					656	166		
					v	^		
		287	<	IN	=	822	<	0
		37	>	OUT	=	822	>	0
					v	^		
					370	129		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					200	21		
					v	^		
		23	<			<		0
		8	>			>		0
					v	^		
					177	13		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					200	30		
					v	^		
		20	<	IN	=	240	<	20
		10	>	OUT	=	250	>	20
					v	^		
					180	10		

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					40	10		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					40	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				90	92	14		
				<	v	>		
		28	^				^	30
		35	>				<	50
		19	v				v	51
				<	^	>		
				54	359	193		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					196	417		
					v	^		
		194	<	IN	=	1015	<	131
		82	>	OUT	=	1015	>	242
					v	^		
					162	606		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				5	5	2		
				<	v	>		
		0	^				^	3
		2	>				<	2
		0	v				v	0
				<	^	>		
				2	46	30		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				95	97	16		
				<	v	>		
		28	^				^	33
		37	>				<	52
		19	v				v	51
				<	^	>		
				56	405	223		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					836	**1394**		
					v	^		
		178	<	IN	=	2229	<	**0**
		677	>	OUT	=	2230	>	**0**
					v	^		
					658	**716**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					18	**11**		
					v	^		
		1	<	IN	=	30	<	**0**
		1	>	OUT	=	29	>	**0**
					v	^		
					17	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					239	393		
					v	^		
		50	<	IN	=	632	<	0
		190	>	OUT	=	632	>	0
					v	^		
					188	203		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					997	**1936**		
					v	^		
		212	<	IN	=	2933	<	**0**
		745	>	OUT	=	2933	>	**0**
					v	^		
					785	**1191**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					28	**30**		
					v	^		
		1	<	IN	=	58	<	**0**
		1	>	OUT	=	58	>	**0**
					v	^		
					27	**29**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					286	550		
					v	^		
		60	<	IN	=	836	<	0
		209	>	OUT	=	836	>	0
					v	^		
					227	341		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					48	157		
					v	^		
		10	<			<		0
		19	>			>		0
					v	^		
					38	138		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	160		
					v	^		
		20	<	IN	=	220	<	10
		20	>	OUT	=	250	>	30
					v	^		
					40	140		

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					10	40		
					v	^		
		0	<			<		0
		0	>			>		10
					v	^		
					10	30		

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**730**
	RIGHT	**149**	OUT ...	**330**		RIGHT	**223**	OUT ...	**180**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**300**	BOUND	THRU	**97**	IN ...	**230**
	RIGHT	**64**	OUT ...	**360**		RIGHT	**95**	OUT ...	**510**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**80**
	RIGHT	**27**	OUT ...	**220**		RIGHT	**19**	OUT ...	**200**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**200**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**210**		RIGHT	**33**	OUT ...	**290**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**65**	NORTH LEG	NORTH	LEFT	**56**	**56**	NORTH LEG
BOUND	THRU	**293**	**301**	RATIO **8.0%**	BOUND	THRU	**405**	**444**	RATIO **9.0%**
	RIGHT	**149**	**150**	ADT 8,200		RIGHT	**223**	**235**	ADT 8,200
SOUTH	LEFT	**17**	**18**	SOUTH LEG	SOUTH	LEFT	**16**	**19**	SOUTH LEG
BOUND	THRU	**179**	**214**	RATIO **8.4%**	BOUND	THRU	**97**	**110**	RATIO **9.1%**
	RIGHT	**64**	**68**	ADT 10,100		RIGHT	**95**	**100**	ADT 10,100
EAST	LEFT	**32**	**34**	EAST LEG	EAST	LEFT	**28**	**29**	EAST LEG
BOUND	THRU	**46**	**46**	RATIO **8.7%**	BOUND	THRU	**37**	**38**	RATIO **9.1%**
	RIGHT	**27**	**30**	ADT 4,800		RIGHT	**19**	**19**	ADT 4,800
WEST	LEFT	**80**	**86**	WEST LEG	WEST	LEFT	**51**	**53**	WEST LEG
BOUND	THRU	**92**	**93**	RATIO **9.9%**	BOUND	THRU	**52**	**52**	RATIO **8.6%**
	RIGHT	**24**	**25**	ADT 3,400		RIGHT	**33**	**38**	ADT 3,400

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2			
				<	v	>			
			0	^			^	1	
			402	>			<	575	
			2	v			v	10	
				<	^	>			
				3	0	6			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1			
					v	^			
			578	<	IN =	1001	<	586	
			404	>	OUT =	1001	>	410	
					v	^			
					12	9			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0			
				<	v	>			
			0	^			^	0	
			64	>			<	52	
			0	v			v	0	
				<	^	>			
				0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2			
				<	v	>			
			0	^			^	1	
			466	>			<	627	
			2	v			v	10	
				<	^	>			
				3	0	6			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**			
					v	^			
			793	<	IN =	1295	<	**793**	
			502	>	OUT =	1295	>	**502**	
					v	^			
					0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
			13	<	IN =	25	<	**13**	
			12	>	OUT =	25	>	**12**	
					v	^			
					0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0			
					v	^			
			306	<	IN =	500	<	306	
			195	>	OUT =	500	>	195	
					v	^			
					0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**			
					v	^			
			1412	<	IN =	1998	<	**1412**	
			586	>	OUT =	1998	>	**586**	
					v	^			
					0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**			
					v	^			
			35	<	IN =	52	<	**35**	
			17	>	OUT =	52	>	**17**	
					v	^			
					0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0			
					v	^			
			548	<	IN =	777	<	548	
			228	>	OUT =	777	>	228	
					v	^			
					0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0			
					v	^			
			243	<			<	243	
			34	>			>	34	
					v	^			
					0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0			
					v	^			
			240	<	IN =	290	<	240	
			50	>	OUT =	290	>	50	
					v	^			
					0	0			

FUTURE YEAR GROWTH: 2016 TO **2020**

4 YEARS

					0	0			
					v	^			
			40	<			<	40	
			10	>			>	10	
					v	^			
					0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5			
				<	v	>			
			3	^			^	2	
			637	>			<	524	
			2	v			v	14	
				<	^	>			
				10	0	7			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5			
					v	^			
			536	<	IN =	1206	<	540	
			642	>	OUT =	1206	>	649	
					v	^			
					16	17			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0			
				<	v	>			
			0	^			^	0	
			61	>			<	24	
			0	v			v	0	
				<	^	>			
				0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5			
				<	v	>			
			3	^			^	2	
			698	>			<	548	
			2	v			v	14	
				<	^	>			
				10	0	7			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**			
					v	^			
			945	<	IN =	2157	<	**945**	
			1212	>	OUT =	2157	>	**1212**	
					v	^			
					0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
			18	<	IN =	39	<	**18**	
			21	>	OUT =	39	>	**21**	
					v	^			
					0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0			
					v	^			
			269	<	IN =	614	<	269	
			345	>	OUT =	614	>	345	
					v	^			
					0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**			
					v	^			
			1204	<	IN =	2986	<	**1204**	
			1782	>	OUT =	2986	>	**1782**	
					v	^			
					0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**			
					v	^			
			42	<	IN =	85	<	**42**	
			43	>	OUT =	85	>	**43**	
					v	^			
					0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0			
					v	^			
			348	<	IN =	857	<	348	
			510	>	OUT =	857	>	510	
					v	^			
					0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0			
					v	^			
			79	<			<	79	
			165	>			>	165	
					v	^			
					0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0			
					v	^			
			80	<	IN =	250	<	80	
			170	>	OUT =	250	>	170	
					v	^			
					0	0			

FUTURE YEAR GROWTH: 2016 TO 2020

4 YEARS

					0	0			
					v	^			
			10	<			<	10	
			30	>			>	30	
					v	^			
					0	0			

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**480**	BOUND	THRU	**698**	IN ...	**740**
	RIGHT	**2**	OUT ...	**680**		RIGHT	**2**	OUT ...	**570**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**680**	BOUND	THRU	**548**	IN ...	**570**
	RIGHT	**1**	OUT ...	**480**		RIGHT	**2**	OUT ...	**740**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**474**	RATIO **8.4%**	BOUND	THRU	**698**	**725**	RATIO **9.4%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**676**	RATIO **8.3%**	BOUND	THRU	**548**	**554**	RATIO **9.3%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		359	>				<	419		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					0	0				
					v	^				
		419	<	IN	=	778	<	419		
		359	>	OUT	=	778	>	359		
					v	^				
					0	0				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		64	>				<	125		
		0	v				v	0		
				<	^	>				
				0	0	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		423	>				<	544		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					v	^				
		793	<	IN	=	1295	<	**793**		
		502	>	OUT	=	1295	>	**502**		
					v	^				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					v	^				
		13	<	IN	=	25	<	**13**		
		12	>	OUT	=	25	>	**12**		
					v	^				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
		306	<	IN	=	500	<	306		
		195	>	OUT	=	500	>	195		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					v	^				
		1412	<	IN	=	1998	<	**1412**		
		586	>	OUT	=	1998	>	**586**		
					v	^				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					v	^				
		35	<	IN	=	52	<	**35**		
		17	>	OUT	=	52	>	**17**		
					v	^				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
		548	<	IN	=	777	<	548		
		228	>	OUT	=	777	>	228		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
		243	<				<	243		
		34	>				>	34		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		240	<	IN	=	280	<	240		
		40	>	OUT	=	280	>	40		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					0	0				
					v	^				
		50	<				<	50		
		10	>				>	10		
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		567	>				<	510		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					0	0				
					v	^				
		510	<	IN	=	1077	<	510		
		567	>	OUT	=	1077	>	567		
					v	^				
					0	0				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		54	>				<	58		
		0	v				v	0		
				<	^	>				
				0	0	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		621	>				<	568		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					v	^				
		945	<	IN	=	2157	<	**945**		
		1212	>	OUT	=	2157	>	**1212**		
					v	^				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					v	^				
		18	<	IN	=	39	<	**18**		
		21	>	OUT	=	39	>	**21**		
					v	^				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
		269	<	IN	=	614	<	269		
		345	>	OUT	=	614	>	345		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					v	^				
		1204	<	IN	=	2986	<	**1204**		
		1782	>	OUT	=	2986	>	**1782**		
					v	^				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					v	^				
		42	<	IN	=	85	<	**42**		
		43	>	OUT	=	85	>	**43**		
					v	^				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
		348	<	IN	=	857	<	348		
		510	>	OUT	=	857	>	510		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
		79	<				<	79		
		165	>				>	165		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		80	<	IN	=	250	<	80		
		170	>	OUT	=	250	>	170		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					0	0				
					v	^				
		20	<				<	20		
		40	>				>	40		
					v	^				
					0	0				

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**660**
	RIGHT	**0**	OUT ...	**590**		RIGHT	**0**	OUT ...	**590**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**590**	BOUND	THRU	**568**	IN ...	**590**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**660**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.1%**	BOUND	THRU	**621**	**660**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,300		RIGHT	**0**	**0**	ADT 14,300
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**590**	RATIO **7.1%**	BOUND	THRU	**568**	**590**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,300		RIGHT	**0**	**0**	ADT 14,300

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		359	>				<	419		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					0	0				
					v	^				
			419	<	IN	=	778	<	419	
			359	>	OUT	=	778	>	359	
					v	^				
					0	0				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		64	>				<	125		
		0	v				v	0		
				<	^	>				
				0	0	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		423	>				<	544		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					v	^				
			793	<	IN	=	1295	<	**793**	
			502	>	OUT	=	1295	>	**502**	
					v	^				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					v	^				
			13	<	IN	=	25	<	**13**	
			12	>	OUT	=	25	>	**12**	
					v	^				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
			306	<	IN	=	500	<	306	
			195	>	OUT	=	500	>	195	
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					v	^				
			1412	<	IN	=	1998	<	**1412**	
			586	>	OUT	=	1998	>	**586**	
					v	^				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					v	^				
			35	<	IN	=	52	<	**35**	
			17	>	OUT	=	52	>	**17**	
					v	^				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
			548	<	IN	=	777	<	548	
			228	>	OUT	=	777	>	228	
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
			243	<				<	243	
			34	>				>	34	
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
			240	<	IN	=	280	<	240	
			40	>	OUT	=	280	>	40	
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					0	0				
					v	^				
			50	<				<	50	
			10	>				>	10	
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		567	>				<	510		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					0	0				
					v	^				
			510	<	IN	=	1077	<	510	
			567	>	OUT	=	1077	>	567	
					v	^				
					0	0				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		54	>				<	58		
		0	v				v	0		
				<	^	>				
				0	0	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	0	0				
				<	v	>				
		0	^				^	0		
		621	>				<	568		
		0	v				v	0		
				<	^	>				
				0	0	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					v	^				
			945	<	IN	=	2157	<	**945**	
			1212	>	OUT	=	2157	>	**1212**	
					v	^				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					v	^				
			18	<	IN	=	39	<	**18**	
			21	>	OUT	=	39	>	**21**	
					v	^				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
			269	<	IN	=	614	<	269	
			345	>	OUT	=	614	>	345	
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					v	^				
			1204	<	IN	=	2986	<	**1204**	
			1782	>	OUT	=	2986	>	**1782**	
					v	^				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					v	^				
			42	<	IN	=	85	<	**42**	
			43	>	OUT	=	85	>	**43**	
					v	^				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
			348	<	IN	=	857	<	348	
			510	>	OUT	=	857	>	510	
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
			79	<				<	79	
			165	>				>	165	
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
			80	<	IN	=	250	<	80	
			170	>	OUT	=	250	>	170	
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					0	0				
					v	^				
			20	<				<	20	
			40	>				>	40	
					v	^				
					0	0				

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**660**
	RIGHT	**0**	OUT ...	**590**		RIGHT	**0**	OUT ...	**590**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**590**	BOUND	THRU	**568**	IN ...	**590**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**660**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.1%**	BOUND	THRU	**621**	**660**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,300		RIGHT	**0**	**0**	ADT 14,300
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**590**	RATIO **7.1%**	BOUND	THRU	**568**	**590**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,300		RIGHT	**0**	**0**	ADT 14,300

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				14	2	9			
				<	v	>			
		19	^				^	11	
		324	>				<	400	
		16	v				v	11	
				<	^	>			
				5	1	18			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					25	31			
					v	^			
		419	<	IN	=	830	<	422	
		359	>	OUT	=	830	>	351	
					v	^			
					29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				8	0	2			
				<	v	>			
		0	^				^	3	
		63	>				<	116	
		2	v				v	0	
				<	^	>			
				2	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				22	2	11			
				<	v	>			
		19	^				^	14	
		387	>				<	516	
		18	v				v	11	
				<	^	>			
				7	1	18			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					53	**81**			
					v	^			
		793	<	IN	=	1721	<	**983**	
		502	>	OUT	=	1720	>	**669**	
					v	^			
					177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
		13	<	IN	=	28	<	**14**	
		12	>	OUT	=	28	>	**13**	
					v	^			
					2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					20	31			
					v	^			
		306	<	IN	=	663	<	378	
		195	>	OUT	=	663	>	259	
					v	^			
					68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					141	**129**			
					v	^			
		1412	<	IN	=	2632	<	**1678**	
		586	>	OUT	=	2632	>	**735**	
					v	^			
					356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					1	**1**			
					v	^			
		35	<	IN	=	60	<	**38**	
		17	>	OUT	=	60	>	**20**	
					v	^			
					4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					54	49			
					v	^			
		548	<	IN	=	1020	<	650	
		228	>	OUT	=	1020	>	286	
					v	^			
					137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					34	19			
					v	^			
		243	<				<	272	
		34	>				>	27	
					v	^			
					69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	20			
					v	^			
		240	<	IN	=	360	<	270	
		40	>	OUT	=	370	>	40	
					v	^			
					70	20			

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					10	0			
					v	^			
		50	<				<	60	
		10	>				>	10	
					v	^			
					20	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				16	0	10			
				<	v	>			
		26	^				^	15	
		529	>				<	488	
		12	v				v	18	
				<	^	>			
				6	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					26	41			
					v	^			
		510	<	IN	=	1129	<	521	
		567	>	OUT	=	1129	>	548	
					v	^			
					30	15			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	0	7			
				<	v	>			
		8	^				^	3	
		46	>				<	52	
		0	v				v	0	
				<	^	>			
				5	0	2			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				18	0	17			
				<	v	>			
		34	^				^	18	
		575	>				<	540	
		12	v				v	18	
				<	^	>			
				11	0	11			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					125	**83**			
					v	^			
		945	<	IN	=	2793	<	**1206**	
		1212	>	OUT	=	2793	>	**1471**	
					v	^			
					294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**			
					v	^			
		18	<	IN	=	43	<	**20**	
		21	>	OUT	=	44	>	**24**	
					v	^			
					2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					35	23			
					v	^			
		269	<	IN	=	793	<	343	
		345	>	OUT	=	793	>	418	
					v	^			
					83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					232	**246**			
					v	^			
		1204	<	IN	=	4038	<	**1441**	
		1782	>	OUT	=	4038	>	**2154**	
					v	^			
					434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					2	**2**			
					v	^			
		42	<	IN	=	97	<	**46**	
		43	>	OUT	=	98	>	**48**	
					v	^			
					6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					65	69			
					v	^			
		348	<	IN	=	1155	<	415	
		510	>	OUT	=	1155	>	615	
					v	^			
					123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					30	46			
					v	^			
		79	<				<	72	
		165	>				>	197	
					v	^			
					40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	50			
					v	^			
		80	<	IN	=	360	<	70	
		170	>	OUT	=	370	>	200	
					v	^			
					40	90			

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					10	10			
					v	^			
		20	<				<	20	
		40	>				>	40	
					v	^			
					10	20			

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**30**	BOUND	THRU	**0**	IN ...	**40**
	RIGHT	**18**	OUT ...	**50**		RIGHT	**11**	OUT ...	**40**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**22**	OUT ...	**30**		RIGHT	**18**	OUT ...	**60**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**430**	BOUND	THRU	**575**	IN ...	**660**
	RIGHT	**18**	OUT ...	**600**		RIGHT	**12**	OUT ...	**600**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**600**	BOUND	THRU	**540**	IN ...	**600**
	RIGHT	**14**	OUT ...	**430**		RIGHT	**18**	OUT ...	**650**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**7**	NORTH LEG	NORTH	LEFT	**11**	**20**	NORTH LEG
BOUND	THRU	**1**	**1**	RATIO **7.0%**	BOUND	THRU	**0**	**0**	RATIO **9.2%**
	RIGHT	**18**	**22**	ADT 1,200		RIGHT	**11**	**20**	ADT 1,200
SOUTH	LEFT	**11**	**17**	SOUTH LEG	SOUTH	LEFT	**17**	**25**	SOUTH LEG
BOUND	THRU	**2**	**4**	RATIO **8.9%**	BOUND	THRU	**0**	**0**	RATIO **8.9%**
	RIGHT	**22**	**29**	ADT 900		RIGHT	**18**	**25**	ADT 900
EAST	LEFT	**19**	**19**	EAST LEG	EAST	LEFT	**34**	**39**	EAST LEG
BOUND	THRU	**387**	**392**	RATIO **7.2%**	BOUND	THRU	**575**	**605**	RATIO **8.7%**
	RIGHT	**18**	**26**	ADT 14,300		RIGHT	**12**	**16**	ADT 14,300
WEST	LEFT	**11**	**20**	WEST LEG	WEST	LEFT	**18**	**24**	WEST LEG
BOUND	THRU	**516**	**564**	RATIO **7.3%**	BOUND	THRU	**540**	**555**	RATIO **8.8%**
	RIGHT	**14**	**14**	ADT 14,300		RIGHT	**18**	**21**	ADT 14,300

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	24			
				v	^			
0	<		IN =		53	<		0
0	>		OUT =		53	>		0
				v	^			
				29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	2	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

			0	2	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	31	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	26	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				177	**183**			
				v	^			
			<	IN =	360	<		
			>	OUT =	360	>		
				v	^			
				177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				68	70			
				v	^			
0	<		IN =		138	<		0
0	>		OUT =		138	>		0
				v	^			
				68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				356	**227**			
				v	^			
			<	IN =	583	<		
			>	OUT =	583	>		
				v	^			
				356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				4	**4**			
				v	^			
			<	IN =	8	<		
			>	OUT =	8	>		
				v	^			
				4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				137	88			
				v	^			
0	<		IN =		224	<		0
0	>		OUT =		224	>		0
				v	^			
				137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				69	17			
				v	^			
0	<				<			0
0	>				>			0
				v	^			
				69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				70	20			
				v	^			
0	<		IN =		90	<		0
0	>		OUT =		90	>		0
				v	^			
				70	20			

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

				20	0			
				v	^			
0	<				<			0
0	>				>			0
				v	^			
				20	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	19	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	19			
				v	^			
0	<		IN =		48	<		0
0	>		OUT =		48	>		0
				v	^			
				29	19			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

			0	5	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				294	**250**			
				v	^			
			<	IN =	544	<		
			>	OUT =	544	>		
				v	^			
				294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				83	71			
				v	^			
0	<		IN =		153	<		0
0	>		OUT =		153	>		0
				v	^			
				83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				434	**583**			
				v	^			
			<	IN =	1017	<		
			>	OUT =	1017	>		
				v	^			
				434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				6	**6**			
				v	^			
			<	IN =	12	<		
			>	OUT =	12	>		
				v	^			
				6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				123	165			
				v	^			
0	<		IN =		288	<		0
0	>		OUT =		288	>		0
				v	^			
				123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				40	94			
				v	^			
0	<				<			0
0	>				>			0
				v	^			
				40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				40	90			
				v	^			
0	<		IN =		130	<		0
0	>		OUT =		130	>		0
				v	^			
				40	90			

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

				10	20			
				v	^			
0	<				<			0
0	>				>			0
				v	^			
				10	20			

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**40**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**40**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **8.9%**	BOUND	THRU	**24**	**40**	RATIO **8.9%**
	RIGHT	**0**	**0**	ADT 900		RIGHT	**0**	**0**	ADT 900
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **8.9%**	BOUND	THRU	**29**	**40**	RATIO **8.9%**
	RIGHT	**0**	**0**	ADT 900		RIGHT	**0**	**0**	ADT 900
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	24	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24				
					v	^				
			0	<	IN =	53	<			0
			0	>	OUT =	53	>			0
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	2	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	26	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**				
					v	^				
				<	IN =	360	<			
				>	OUT =	360	>			
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
				<	IN =	4	<			
				>	OUT =	4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70				
					v	^				
			0	<	IN =	138	<			0
			0	>	OUT =	138	>			0
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**				
					v	^				
				<	IN =	583	<			
				>	OUT =	583	>			
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**				
					v	^				
				<	IN =	8	<			
				>	OUT =	8	>			
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88				
					v	^				
			0	<	IN =	224	<			0
			0	>	OUT =	224	>			0
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17				
					v	^				
			0	<			<			0
			0	>			>			0
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20				
					v	^				
			0	<	IN =	90	<			0
			0	>	OUT =	90	>			0
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					20	0				
					v	^				
			0	<			<			0
			0	>			>			0
					v	^				
					20	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	19	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19				
					v	^				
			0	<	IN =	48	<			0
			0	>	OUT =	48	>			0
					v	^				
					29	19				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	5	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0				
				<	v	>				
		0	^					^		0
		0	>					<		0
		0	v					v		0
				<	^	>				
				0	24	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**				
					v	^				
				<	IN =	544	<			
				>	OUT =	544	>			
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
				<	IN =	4	<			
				>	OUT =	4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71				
					v	^				
			0	<	IN =	153	<			0
			0	>	OUT =	153	>			0
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**				
					v	^				
				<	IN =	1017	<			
				>	OUT =	1017	>			
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**				
					v	^				
				<	IN =	12	<			
				>	OUT =	12	>			
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165				
					v	^				
			0	<	IN =	288	<			0
			0	>	OUT =	288	>			0
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94				
					v	^				
			0	<			<			0
			0	>			>			0
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90				
					v	^				
			0	<	IN =	130	<			0
			0	>	OUT =	130	>			0
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					10	20				
					v	^				
			0	<			<			0
			0	>			>			0
					v	^				
					10	20				

Valle Vista Road (NS) at: Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**30**	BOUND	THRU	**24**	IN ...	**40**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**30**		RIGHT	**0**	OUT ...	**40**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**30**	RATIO **8.9%**	BOUND	THRU	**24**	**40**	RATIO **8.9%**
	RIGHT	**0**	**0**	ADT 900		RIGHT	**0**	**0**	ADT 900
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **8.9%**	BOUND	THRU	**29**	**40**	RATIO **8.9%**
	RIGHT	**0**	**0**	ADT 900		RIGHT	**0**	**0**	ADT 900
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
					<	^	>			
					0	2	21			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						94	31			
						v	^			
			272	<			<		162	
			27	>			>		-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

						20	10			
						v	^			
			60	<			<		40	
			10	>			>		10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
					<	^	>			
					3	10	15			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						43	110			
						v	^			
			72	<			<		4	
			197	>			>		62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

						10	20			
						v	^			
			20	<			<		10	
			40	>			>		20	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**200**	BOUND	THRU	**30**	IN ...	**140**
	RIGHT	**85**	OUT ...	**90**		RIGHT	**46**	OUT ...	**230**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**400**	BOUND	THRU	**485**	IN ...	**640**
	RIGHT	**8**	OUT ...	**580**		RIGHT	**12**	OUT ...	**530**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**600**	BOUND	THRU	**445**	IN ...	**600**
	RIGHT	**32**	OUT ...	**600**		RIGHT	**59**	OUT ...	**760**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**10**	NORTH LEG	NORTH	LEFT	**18**	**19**	NORTH LEG
BOUND	THRU	**15**	**16**	RATIO **7.0%**	BOUND	THRU	**50**	**54**	RATIO **8.9%**
	RIGHT	**190**	**192**	ADT 4,200		RIGHT	**193**	**196**	ADT 4,200
SOUTH	LEFT	**60**	**62**	SOUTH LEG	SOUTH	LEFT	**58**	**59**	SOUTH LEG
BOUND	THRU	**38**	**39**	RATIO **8.1%**	BOUND	THRU	**30**	**32**	RATIO **8.7%**
	RIGHT	**85**	**101**	ADT 4,600		RIGHT	**46**	**51**	ADT 4,600
EAST	LEFT	**36**	**40**	EAST LEG	EAST	LEFT	**98**	**115**	EAST LEG
BOUND	THRU	**344**	**353**	RATIO **7.8%**	BOUND	THRU	**485**	**514**	RATIO **8.8%**
	RIGHT	**8**	**8**	ADT 15,600		RIGHT	**12**	**14**	ADT 15,600
WEST	LEFT	**108**	**109**	WEST LEG	WEST	LEFT	**84**	**84**	WEST LEG
BOUND	THRU	**421**	**469**	RATIO **7.3%**	BOUND	THRU	**445**	**460**	RATIO **8.8%**
	RIGHT	**32**	**34**	ADT 13,400		RIGHT	**59**	**61**	ADT 13,400

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6				
				<	v	>				
		4	^				^	5		
		509	>				<	483		
		16	v				v	15		
				<	^	>				
				25	2	29				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11				
					v	^				
		514	<	IN	=	1101	<	503		
		529	>	OUT	=	1101	>	544		
					v	^				
					32	56				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	3		
		82	>				<	89		
		4	v				v	2		
				<	^	>				
				0	0	4				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6				
				<	v	>				
		4	^				^	8		
		591	>				<	572		
		20	v				v	17		
				<	^	>				
				25	2	33				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		997	<	IN	=	1768	<	**997**		
		771	>	OUT	=	1768	>	**771**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		14	<	IN	=	28	<	**14**		
		14	>	OUT	=	28	>	**14**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
		384	<	IN	=	681	<	384		
		298	>	OUT	=	681	>	298		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1408	<	IN	=	2121	<	**1408**		
		713	>	OUT	=	2121	>	**713**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		31	<	IN	=	48	<	**31**		
		17	>	OUT	=	48	>	**17**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
		545	<	IN	=	822	<	545		
		277	>	OUT	=	822	>	277		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
		162	<				<	162		
		-21	>				>	-21		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		160	<	IN	=	220	<	160		
		60	>	OUT	=	220	>	60		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2020**

6 YEARS

					0	0				
					v	^				
		40	<				<	40		
		10	>				>	10		
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5				
				<	v	>				
		10	^				^	4		
		589	>				<	537		
		50	v				v	33		
				<	^	>				
				26	0	15				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14				
					v	^				
		569	<	IN	=	1275	<	574		
		649	>	OUT	=	1275	>	609		
					v	^				
					83	41				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0				
				<	v	>				
		0	^				^	2		
		84	>				<	35		
		2	v				v	5		
				<	^	>				
				2	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5				
				<	v	>				
		10	^				^	6		
		673	>				<	572		
		52	v				v	38		
				<	^	>				
				28	0	18				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		1333	<	IN	=	2884	<	**1333**		
		1551	>	OUT	=	2884	>	**1551**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		21	<	IN	=	46	<	**21**		
		25	>	OUT	=	46	>	**25**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
		378	<	IN	=	819	<	378		
		441	>	OUT	=	819	>	441		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1330	<	IN	=	3088	<	**1330**		
		1758	>	OUT	=	3088	>	**1758**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		41	<	IN	=	82	<	**41**		
		41	>	OUT	=	82	>	**41**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
		383	<	IN	=	885	<	383		
		502	>	OUT	=	885	>	502		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
		4	<				<	4		
		62	>				>	62		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		60	<	IN	=	130	<	60		
		70	>	OUT	=	130	>	70		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2020

6 YEARS

					0	0				
					v	^				
		10	<				<	10		
		20	>				>	20		
					v	^				
					0	0				

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**630**	BOUND	THRU	**673**	IN ...	**760**
	RIGHT	**20**	OUT ...	**640**		RIGHT	**52**	OUT ...	**620**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**640**	BOUND	THRU	**572**	IN ...	**630**
	RIGHT	**8**	OUT ...	**640**		RIGHT	**6**	OUT ...	**720**

OPENING YEAR (2020) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**26**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**33**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **6.3%**	BOUND	THRU	**2**	**2**	RATIO **9.0%**
	RIGHT	**6**	**6**	ADT 1,600		RIGHT	**8**	**11**	ADT 1,600
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**602**	RATIO **8.2%**	BOUND	THRU	**673**	**693**	RATIO **8.7%**
	RIGHT	**20**	**20**	ADT 15,500		RIGHT	**52**	**53**	ADT 15,500
WEST	LEFT	**17**	**19**	WEST LEG	WEST	LEFT	**38**	**39**	WEST LEG
BOUND	THRU	**572**	**610**	RATIO **8.0%**	BOUND	THRU	**572**	**580**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 15,800		RIGHT	**6**	**8**	ADT 15,800

Opening Year (2021)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					17	9				
					v	^				
		152	<	IN	=	632	<	304		
		249	>	OUT	=	632	>	274		
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
				<	^	>				
				2	0	20				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					374	**166**				
					v	^				
		177	<	IN	=	1173	<	**197**		
		327	>	OUT	=	1173	>	**311**		
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					3	**3**				
					v	^				
		7	<	IN	=	22	<	**8**		
		7	>	OUT	=	21	>	**7**		
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					143	64				
					v	^				
		70	<	IN	=	453	<	78		
		127	>	OUT	=	453	>	121		
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					613	**273**				
					v	^				
		263	<	IN	=	1517	<	**288**		
		314	>	OUT	=	1517	>	**312**		
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**5**				
					v	^				
		14	<	IN	=	38	<	**15**		
		11	>	OUT	=	38	>	**11**		
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					235	105				
					v	^				
		105	<	IN	=	589	<	114		
		123	>	OUT	=	589	>	122		
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					92	41				
					v	^				
		35	<				<	37		
		-4	>				>	2		
					v	^				
					58	11				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					90	40				
					v	^				
		40	<	IN	=	170	<	40		
		30	>	OUT	=	170	>	30		
					v	^				
					60	10				

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

					20	10				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					20	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	21				
					v	^				
		261	<	IN	=	773	<	467		
		242	>	OUT	=	773	>	262		
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
				<	^	>				
				0	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					346	**524**				
					v	^				
		490	<	IN	=	2005	<	**500**		
		446	>	OUT	=	2004	>	**450**		
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					5	**5**				
					v	^				
		9	<	IN	=	36	<	**9**		
		16	>	OUT	=	36	>	**16**		
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					98	148				
					v	^				
		139	<	IN	=	570	<	142		
		129	>	OUT	=	570	>	130		
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					537	**783**				
					v	^				
		673	<	IN	=	2578	<	**540**		
		509	>	OUT	=	2578	>	**483**		
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**7**				
					v	^				
		23	<	IN	=	64	<	**23**		
		25	>	OUT	=	63	>	**25**		
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					152	221				
					v	^				
		194	<	IN	=	738	<	157		
		149	>	OUT	=	738	>	141		
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					54	73				
					v	^				
		55	<				<	15		
		20	>				>	11		
					v	^				
					28	79				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	70				
					v	^				
		50	<	IN	=	210	<	50		
		30	>	OUT	=	180	>	30		
					v	^				
					30	80				

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

					10	20				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					10	20				

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**80**	BOUND	THRU	**5**	IN ...	**80**
	RIGHT	**65**	OUT ...	**260**		RIGHT	**37**	OUT ...	**270**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**40**	BOUND	THRU	**3**	IN ...	**20**
	RIGHT	**0**	OUT ...	**20**		RIGHT	**1**	OUT ...	**40**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**320**	BOUND	THRU	**264**	IN ...	**300**
	RIGHT	**30**	OUT ...	**230**		RIGHT	**21**	OUT ...	**300**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**420**	BOUND	THRU	**279**	IN ...	**540**
	RIGHT	**7**	OUT ...	**360**		RIGHT	**14**	OUT ...	**320**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**16**	NORTH LEG	NORTH	LEFT	**14**	**21**	NORTH LEG
BOUND	THRU	**3**	**4**	RATIO **7.6%**	BOUND	THRU	**5**	**13**	RATIO **7.4%**
	RIGHT	**65**	**66**	ADT 800		RIGHT	**37**	**45**	ADT 800
SOUTH	LEFT	**5**	**12**	SOUTH LEG	SOUTH	LEFT	**7**	**11**	SOUTH LEG
BOUND	THRU	**12**	**29**	RATIO **9.0%**	BOUND	THRU	**3**	**6**	RATIO **9.0%**
	RIGHT	**0**	**0**	ADT 3,900		RIGHT	**1**	**2**	ADT 3,900
EAST	LEFT	**3**	**5**	EAST LEG	EAST	LEFT	**2**	**4**	EAST LEG
BOUND	THRU	**277**	**281**	RATIO **7.9%**	BOUND	THRU	**264**	**264**	RATIO **8.6%**
	RIGHT	**30**	**31**	ADT 10,000		RIGHT	**21**	**26**	ADT 10,000
WEST	LEFT	**202**	**205**	WEST LEG	WEST	LEFT	**240**	**240**	WEST LEG
BOUND	THRU	**202**	**214**	RATIO **7.9%**	BOUND	THRU	**279**	**279**	RATIO **8.6%**
	RIGHT	**7**	**11**	ADT 6,900		RIGHT	**14**	**23**	ADT 6,900

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
		15	^					^		24
		245	>					<		249
		36	v					v		14
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
				297	<	IN	=	686	<	287
				296	>	OUT	=	686	>	292
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
		2	^					^		7
		54	>					<		158
		2	v					v		12
PCE FACTORS BY AXLE:					<	^	>			
2: **1.5** 3: **2.0** 4+: **3.0**					9	0	5			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
		17	^					^		31
		299	>					<		407
		38	v					v		26
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
				197	<	IN	=	510	<	**197**
				311	>	OUT	=	511	>	**314**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
				8	<	IN	=	17	<	**8**
				7	>	OUT	=	18	>	**10**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
				78	<	IN	=	199	<	78
				121	>	OUT	=	200	>	123
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
				290	<	IN	=	646	<	**290**
				354	>	OUT	=	646	>	**356**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
				15	<	IN	=	27	<	**15**
				11	>	OUT	=	29	>	**14**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
				115	<	IN	=	254	<	115
				138	>	OUT	=	255	>	140
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						0	0			
						v	^			
				38	<			<		38
				18	>			>		17
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						0	10			
						v	^			
				50	<	IN	=	90	<	50
				40	>	OUT	=	100	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

						0	0			
						v	^			
				10	<			<		10
				10	>			>		10
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
		28	^					^		83
		224	>					<		404
		33	v					v		50
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
				506	<	IN	=	1083	<	537
				285	>	OUT	=	1083	>	323
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
		2	^					^		7
		33	>					<		46
		3	v					v		6
PCE FACTORS BY AXLE:					<	^	>			
2: 1.5 3: 2 4+: 3.0					14	3	6			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
		30	^					^		90
		257	>					<		450
		36	v					v		56
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
				500	<	IN	=	952	<	**500**
				450	>	OUT	=	954	>	**454**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
				9	<	IN	=	27	<	**9**
				16	>	OUT	=	29	>	**20**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
				142	<	IN	=	273	<	142
				130	>	OUT	=	274	>	132
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
				616	<	IN	=	1138	<	**616**
				520	>	OUT	=	1140	>	**524**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**0**			
						v	^			
				23	<	IN	=	51	<	**23**
				26	>	OUT	=	52	>	**29**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
				178	<	IN	=	331	<	178
				152	>	OUT	=	332	>	154
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						0	0			
						v	^			
				36	<			<		36
				22	>			>		22
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						10	10			
						v	^			
				60	<	IN	=	100	<	60
				30	>	OUT	=	110	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

						0	0			
						v	^			
				20	<			<		20
				10	>			>		10
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**360**	BOUND	THRU	**257**	IN ...	**330**
	RIGHT	**38**	OUT ...	**470**		RIGHT	**36**	OUT ...	**590**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**470**	BOUND	THRU	**450**	IN ...	**620**
	RIGHT	**31**	OUT ...	**370**		RIGHT	**90**	OUT ...	**370**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**41**	NORTH LEG	NORTH	LEFT	**89**	**91**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.0%**	BOUND	THRU	**27**	**27**	RATIO **8.5%**
	RIGHT	**43**	**44**	ADT 2,900		RIGHT	**81**	**82**	ADT 2,900
SOUTH	LEFT	**14**	**14**	SOUTH LEG	SOUTH	LEFT	**26**	**27**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.1%**	BOUND	THRU	**38**	**39**	RATIO **8.5%**
	RIGHT	**17**	**17**	ADT 3,900		RIGHT	**29**	**30**	ADT 3,900
EAST	LEFT	**17**	**17**	EAST LEG	EAST	LEFT	**30**	**31**	EAST LEG
BOUND	THRU	**299**	**310**	RATIO **7.4%**	BOUND	THRU	**257**	**263**	RATIO **8.7%**
	RIGHT	**38**	**39**	ADT 11,400		RIGHT	**36**	**36**	ADT 11,400
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**57**	WEST LEG
BOUND	THRU	**407**	**416**	RATIO **8.0%**	BOUND	THRU	**450**	**471**	RATIO **8.8%**
	RIGHT	**31**	**32**	ADT 10,500		RIGHT	**90**	**92**	ADT 10,500

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	86	94			
					<	v	>			
			39	^				^		29
			214	>				<		300
			32	v				v		122
					<	^	>			
					52	92	101			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						257	160			
						v	^			
			429	<	IN	=	1238	<		451
			285	>	OUT	=	1238	>		409
						v	^			
						240	245			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					13	5	20			
					<	v	>			
			9	^				^		3
			56	>				<		68
			8	v				v		5
					<	^	>			
					15	20	18			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					90	91	114			
					<	v	>			
			48	^				^		32
			270	>				<		368
			40	v				v		127
					<	^	>			
					67	112	119			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						720	**305**			
						v	^			
			197	<	IN	=	2198	<		**793**
			314	>	OUT	=	2197	>		**502**
						v	^			
						1193	**371**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						7	**10**			
						v	^			
			8	<	IN	=	41	<		**13**
			10	>	OUT	=	40	>		**12**
						v	^			
						10	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						276	119			
						v	^			
			78	<	IN	=	849	<		306
			123	>	OUT	=	848	>		195
						v	^			
						457	145			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						674	**289**			
						v	^			
			290	<	IN	=	2869	<		**1412**
			356	>	OUT	=	2867	>		**586**
						v	^			
						1702	**427**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						11	**8**			
						v	^			
			15	<	IN	=	71	<		**35**
			14	>	OUT	=	69	>		**17**
						v	^			
						29	**11**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						260	112			
						v	^			
			115	<	IN	=	1114	<		548
			140	>	OUT	=	1112	>		228
						v	^			
						656	166			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						-16	-7			
						v	^			
			38	<				<		243
			17	>				>		34
						v	^			
						200	21			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
			50	<	IN	=	330	<		240
			40	>	OUT	=	320	>		50
						v	^			
						200	20			

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

						10	10			
						v	^			
			10	<				<		60
			10	>				>		10
						v	^			
						50	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					95	87	111			
					<	v	>			
			83	^				^		45
			270	>				<		363
			36	v				v		99
					<	^	>			
					106	145	171			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						293	273			
						v	^			
			564	<	IN	=	1611	<		507
			389	>	OUT	=	1611	>		552
						v	^			
						222	422			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					12	4	7			
					<	v	>			
			2	^				^		10
			40	>				<		50
			0	v				v		9
					<	^	>			
					5	14	17			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					107	91	118			
					<	v	>			
			85	^				^		55
			310	>				<		413
			36	v				v		108
					<	^	>			
					111	159	188			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						588	**830**			
						v	^			
			500	<	IN	=	3381	<		**945**
			454	>	OUT	=	3378	>		**1212**
						v	^			
						836	**1394**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						12	**10**			
						v	^			
			9	<	IN	=	61	<		**18**
			20	>	OUT	=	58	>		**21**
						v	^			
						18	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						168	235			
						v	^			
			142	<	IN	=	962	<		269
			132	>	OUT	=	960	>		345
						v	^			
						239	393			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						541	**809**			
						v	^			
			616	<	IN	=	4205	<		**1204**
			524	>	OUT	=	4204	>		**1782**
						v	^			
						997	**1936**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						12	**16**			
						v	^			
			23	<	IN	=	113	<		**42**
			29	>	OUT	=	110	>		**43**
						v	^			
						28	**30**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						154	231			
						v	^			
			178	<	IN	=	1206	<		348
			154	>	OUT	=	1205	>		510
						v	^			
						286	550			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						-13	-4			
						v	^			
			36	<				<		79
			22	>				>		165
						v	^			
						48	157			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	30			
						v	^			
			60	<	IN	=	310	<		80
			40	>	OUT	=	310	>		170
						v	^			
						50	160			

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

						10	10			
						v	^			
			20	<				<		20
			10	>				>		40
						v	^			
						10	40			

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**310**	BOUND	THRU	**159**	IN ...	**500**
	RIGHT	**119**	OUT ...	**310**		RIGHT	**188**	OUT ...	**250**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**310**	BOUND	THRU	**91**	IN ...	**330**
	RIGHT	**90**	OUT ...	**200**		RIGHT	**107**	OUT ...	**310**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**370**	BOUND	THRU	**310**	IN ...	**440**
	RIGHT	**40**	OUT ...	**550**		RIGHT	**36**	OUT ...	**650**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**590**	BOUND	THRU	**413**	IN ...	**600**
	RIGHT	**32**	OUT ...	**520**		RIGHT	**55**	OUT ...	**660**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**67**	NORTH LEG	NORTH	LEFT	**111**	**117**	NORTH LEG
BOUND	THRU	**112**	**116**	RATIO **7.0%**	BOUND	THRU	**159**	**170**	RATIO **8.8%**
	RIGHT	**119**	**126**	ADT 7,300		RIGHT	**188**	**213**	ADT 7,300
SOUTH	LEFT	**114**	**118**	SOUTH LEG	SOUTH	LEFT	**118**	**127**	SOUTH LEG
BOUND	THRU	**91**	**104**	RATIO **7.3%**	BOUND	THRU	**91**	**96**	RATIO **8.8%**
	RIGHT	**90**	**92**	ADT 8,500		RIGHT	**107**	**107**	ADT 8,500
EAST	LEFT	**48**	**48**	EAST LEG	EAST	LEFT	**85**	**87**	EAST LEG
BOUND	THRU	**270**	**276**	RATIO **7.7%**	BOUND	THRU	**310**	**321**	RATIO **8.8%**
	RIGHT	**40**	**46**	ADT 14,400		RIGHT	**36**	**37**	ADT 14,400
WEST	LEFT	**127**	**160**	WEST LEG	WEST	LEFT	**108**	**117**	WEST LEG
BOUND	THRU	**368**	**395**	RATIO **7.3%**	BOUND	THRU	**413**	**425**	RATIO **8.7%**
	RIGHT	**32**	**35**	ADT 12,600		RIGHT	**55**	**57**	ADT 12,600

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				58	168	13		
				<	v	>		
		21	^				^	21
		39	>				<	87
		22	v				v	71
				<	^	>		
				58	268	125		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					239	310		
					v	^		
		203	<	IN	=	951	<	179
		82	>	OUT	=	951	>	177
					v	^		
					261	451		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				6	11	4		
				<	v	>		
		11	^				^	3
		7	>				<	5
		5	v				v	9
				<	^	>		
				7	25	24		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				64	179	17		
				<	v	>		
		32	^				^	24
		46	>				<	92
		27	v				v	80
				<	^	>		
				65	293	149		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					1193	**371**		
					v	^		
		694	<	IN	=	1564	<	**0**
		76	>	OUT	=	1564	>	**0**
					v	^		
					499	**295**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					10	**11**		
					v	^		
		0	<	IN	=	20	<	**0**
		0	>	OUT	=	21	>	**0**
					v	^		
					10	**10**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					457	145		
					v	^		
		264	<	IN	=	601	<	0
		29	>	OUT	=	601	>	0
					v	^		
					193	115		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					1702	**427**		
					v	^		
		754	<	IN	=	2129	<	**0**
		97	>	OUT	=	2129	>	**0**
					v	^		
					948	**330**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					29	**11**		
					v	^		
		1	<	IN	=	40	<	**0**
		1	>	OUT	=	40	>	**0**
					v	^		
					28	**10**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					656	166		
					v	^		
		287	<	IN	=	822	<	0
		37	>	OUT	=	822	>	0
					v	^		
					370	129		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					200	21		
					v	^		
		23	<			<		0
		8	>			>		0
					v	^		
					177	13		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					200	30		
					v	^		
		20	<	IN	=	240	<	20
		10	>	OUT	=	250	>	20
					v	^		
					180	10		

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

					50	10		
					v	^		
		10	<			<		10
		0	>			>		10
					v	^		
					50	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				90	92	14		
				<	v	>		
		28	^				^	30
		35	>				<	50
		19	v				v	51
				<	^	>		
				54	359	193		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					196	417		
					v	^		
		194	<	IN	=	1015	<	131
		82	>	OUT	=	1015	>	242
					v	^		
					162	606		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				5	5	2		
				<	v	>		
		0	^				^	3
		2	>				<	2
		0	v				v	0
				<	^	>		
				2	46	30		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				95	97	16		
				<	v	>		
		28	^				^	33
		37	>				<	52
		19	v				v	51
				<	^	>		
				56	405	223		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					836	**1394**		
					v	^		
		178	<	IN	=	2229	<	**0**
		677	>	OUT	=	2230	>	**0**
					v	^		
					658	**716**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					18	**11**		
					v	^		
		1	<	IN	=	30	<	**0**
		1	>	OUT	=	29	>	**0**
					v	^		
					17	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					239	393		
					v	^		
		50	<	IN	=	632	<	0
		190	>	OUT	=	632	>	0
					v	^		
					188	203		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					997	**1936**		
					v	^		
		212	<	IN	=	2933	<	**0**
		745	>	OUT	=	2933	>	**0**
					v	^		
					785	**1191**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					28	**30**		
					v	^		
		1	<	IN	=	58	<	**0**
		1	>	OUT	=	58	>	**0**
					v	^		
					27	**29**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					286	550		
					v	^		
		60	<	IN	=	836	<	0
		209	>	OUT	=	836	>	0
					v	^		
					227	341		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					48	157		
					v	^		
		10	<			<		0
		19	>			>		0
					v	^		
					38	138		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	160		
					v	^		
		20	<	IN	=	220	<	10
		20	>	OUT	=	250	>	30
					v	^		
					40	140		

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

					10	40		
					v	^		
		10	<			<		0
		10	>			>		10
					v	^		
					10	40		

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**730**
	RIGHT	**149**	OUT ...	**340**		RIGHT	**223**	OUT ...	**180**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**310**	BOUND	THRU	**97**	IN ...	**220**
	RIGHT	**64**	OUT ...	**360**		RIGHT	**95**	OUT ...	**510**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**90**
	RIGHT	**27**	OUT ...	**230**		RIGHT	**19**	OUT ...	**210**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**210**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**220**		RIGHT	**33**	OUT ...	**290**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**67**	NORTH LEG	NORTH	LEFT	**56**	**58**	NORTH LEG
BOUND	THRU	**293**	**300**	RATIO **8.1%**	BOUND	THRU	**405**	**444**	RATIO **8.8%**
	RIGHT	**149**	**152**	ADT 8,300		RIGHT	**223**	**234**	ADT 8,300
SOUTH	LEFT	**17**	**20**	SOUTH LEG	SOUTH	LEFT	**16**	**17**	SOUTH LEG
BOUND	THRU	**179**	**220**	RATIO **8.4%**	BOUND	THRU	**97**	**106**	RATIO **9.0%**
	RIGHT	**64**	**72**	ADT 10,200		RIGHT	**95**	**99**	ADT 10,200
EAST	LEFT	**32**	**34**	EAST LEG	EAST	LEFT	**28**	**31**	EAST LEG
BOUND	THRU	**46**	**48**	RATIO **8.8%**	BOUND	THRU	**37**	**39**	RATIO **8.8%**
	RIGHT	**27**	**29**	ADT 4,900		RIGHT	**19**	**21**	ADT 4,900
WEST	LEFT	**80**	**90**	WEST LEG	WEST	LEFT	**51**	**54**	WEST LEG
BOUND	THRU	**92**	**94**	RATIO **10.1%**	BOUND	THRU	**52**	**52**	RATIO **8.8%**
	RIGHT	**24**	**26**	ADT 3,400		RIGHT	**33**	**35**	ADT 3,400

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		402	>				<	575
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1		
					v	^		
		578	<	IN =	1001	<		586
		404	>	OUT =	1001	>		410
					v	^		
					12	9		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		64	>				<	52
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		466	>				<	627
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		793	<	IN =	1295	<		**793**
		502	>	OUT =	1295	>		**502**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		13	<	IN =	25	<		**13**
		12	>	OUT =	25	>		**12**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		306	<	IN =	500	<		306
		195	>	OUT =	500	>		195
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1412	<	IN =	1998	<		**1412**
		586	>	OUT =	1998	>		**586**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		35	<	IN =	52	<		**35**
		17	>	OUT =	52	>		**17**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		548	<	IN =	777	<		548
		228	>	OUT =	777	>		228
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0		
					v	^		
		243	<			<		243
		34	>			>		34
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		240	<	IN =	290	<		240
		50	>	OUT =	290	>		50
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO **2021**

5 YEARS

					0	0		
					v	^		
		40	<			<		40
		10	>			>		10
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		637	>				<	524
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5		
					v	^		
		536	<	IN =	1206	<		540
		642	>	OUT =	1206	>		649
					v	^		
					16	17		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		61	>				<	24
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		698	>				<	548
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		945	<	IN =	2157	<		**945**
		1212	>	OUT =	2157	>		**1212**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		18	<	IN =	39	<		**18**
		21	>	OUT =	39	>		**21**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		269	<	IN =	614	<		269
		345	>	OUT =	614	>		345
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1204	<	IN =	2986	<		**1204**
		1782	>	OUT =	2986	>		**1782**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		42	<	IN =	85	<		**42**
		43	>	OUT =	85	>		**43**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		348	<	IN =	857	<		348
		510	>	OUT =	857	>		510
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0		
					v	^		
		79	<			<		79
		165	>			>		165
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		80	<	IN =	250	<		80
		170	>	OUT =	250	>		170
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO 2021

5 YEARS

					0	0		
					v	^		
		10	<			<		10
		30	>			>		30
					v	^		
					0	0		

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**480**	BOUND	THRU	**698**	IN ...	**740**
	RIGHT	**2**	OUT ...	**680**		RIGHT	**2**	OUT ...	**570**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**680**	BOUND	THRU	**548**	IN ...	**570**
	RIGHT	**1**	OUT ...	**480**		RIGHT	**2**	OUT ...	**740**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**474**	RATIO **8.4%**	BOUND	THRU	**698**	**725**	RATIO **9.4%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**676**	RATIO **8.3%**	BOUND	THRU	**548**	**554**	RATIO **9.3%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		419 <	IN =		778 <	419		
		359 >	OUT =		778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		793 <	IN =		1295 <	**793**		
		502 >	OUT =		1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		13 <	IN =		25 <	**13**		
		12 >	OUT =		25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
		306 <	IN =		500 <	306		
		195 >	OUT =		500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1412 <	IN =		1998 <	**1412**		
		586 >	OUT =		1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		35 <	IN =		52 <	**35**		
		17 >	OUT =		52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
		548 <	IN =		777 <	548		
		228 >	OUT =		777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
		243 <			<	243		
		34 >			>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		240 <	IN =		280 <	240		
		40 >	OUT =		280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

				0	0			
				v	^			
		60 <			<	60		
		10 >			>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		510 <	IN =		1077 <	510		
		567 >	OUT =		1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		945 <	IN =		2157 <	**945**		
		1212 >	OUT =		2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		18 <	IN =		39 <	**18**		
		21 >	OUT =		39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
		269 <	IN =		614 <	269		
		345 >	OUT =		614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1204 <	IN =		2986 <	**1204**		
		1782 >	OUT =		2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		42 <	IN =		85 <	**42**		
		43 >	OUT =		85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
		348 <	IN =		857 <	348		
		510 >	OUT =		857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
		79 <			<	79		
		165 >			>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		80 <	IN =		250 <	80		
		170 >	OUT =		250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

				0	0			
				v	^			
		20 <			<	20		
		40 >			>	40		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**660**
	RIGHT	**0**	OUT ...	**600**		RIGHT	**0**	OUT ...	**590**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**600**	BOUND	THRU	**568**	IN ...	**590**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**660**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**660**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,400		RIGHT	**0**	**0**	ADT 14,400
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**600**	RATIO **7.2%**	BOUND	THRU	**568**	**590**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,400		RIGHT	**0**	**0**	ADT 14,400

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		419 <	IN =		778 <	419		
		359 >	OUT =		778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		793 <	IN =		1295 <	**793**		
		502 >	OUT =		1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		13 <	IN =		25 <	**13**		
		12 >	OUT =		25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
		306 <	IN =		500 <	306		
		195 >	OUT =		500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1412 <	IN =		1998 <	**1412**		
		586 >	OUT =		1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		35 <	IN =		52 <	**35**		
		17 >	OUT =		52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
		548 <	IN =		777 <	548		
		228 >	OUT =		777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
		243 <			<	243		
		34 >			>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		240 <	IN =		280 <	240		
		40 >	OUT =		280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

				0	0			
				v	^			
		60 <			<	60		
		10 >			>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		510 <	IN =		1077 <	510		
		567 >	OUT =		1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		945 <	IN =		2157 <	**945**		
		1212 >	OUT =		2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		18 <	IN =		39 <	**18**		
		21 >	OUT =		39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
		269 <	IN =		614 <	269		
		345 >	OUT =		614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1204 <	IN =		2986 <	**1204**		
		1782 >	OUT =		2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		42 <	IN =		85 <	**42**		
		43 >	OUT =		85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
		348 <	IN =		857 <	348		
		510 >	OUT =		857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
		79 <			<	79		
		165 >			>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		80 <	IN =		250 <	80		
		170 >	OUT =		250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

				0	0			
				v	^			
		20 <			<	20		
		40 >			>	40		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**660**
	RIGHT	**0**	OUT ...	**600**		RIGHT	**0**	OUT ...	**590**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**600**	BOUND	THRU	**568**	IN ...	**590**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**660**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**660**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,400		RIGHT	**0**	**0**	ADT 14,400
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**600**	RATIO **7.2%**	BOUND	THRU	**568**	**590**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,400		RIGHT	**0**	**0**	ADT 14,400

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					14	2	9			
					<	v	>			
		19	^					^		11
		324	>					<		400
		16	v					v		11
					<	^	>			
					5	1	18			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						25	31			
						v	^			
				419	<	IN	=	830	<	422
				359	>	OUT	=	830	>	351
						v	^			
						29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	0	2			
					<	v	>			
		0	^					^		3
		63	>					<		116
		2	v					v		0
					<	^	>			
					2	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					22	2	11			
					<	v	>			
		19	^					^		14
		387	>					<		516
		18	v					v		11
					<	^	>			
					7	1	18			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						53	**81**			
						v	^			
				793	<	IN	=	1721	<	**983**
				502	>	OUT	=	1720	>	**669**
						v	^			
						177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				13	<	IN	=	28	<	**14**
				12	>	OUT	=	28	>	**13**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						20	31			
						v	^			
				306	<	IN	=	663	<	378
				195	>	OUT	=	663	>	259
						v	^			
						68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						141	**129**			
						v	^			
				1412	<	IN	=	2632	<	**1678**
				586	>	OUT	=	2632	>	**735**
						v	^			
						356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						1	**1**			
						v	^			
				35	<	IN	=	60	<	**38**
				17	>	OUT	=	60	>	**20**
						v	^			
						4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						54	49			
						v	^			
				548	<	IN	=	1020	<	650
				228	>	OUT	=	1020	>	286
						v	^			
						137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						34	19			
						v	^			
				243	<			<		272
				34	>			>		27
						v	^			
						69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
				240	<	IN	=	360	<	270
				40	>	OUT	=	370	>	40
						v	^			
						70	20			

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

						10	10			
						v	^			
				60	<			<		70
				10	>			>		10
						v	^			
						20	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					16	0	10			
					<	v	>			
		26	^					^		15
		529	>					<		488
		12	v					v		18
					<	^	>			
					6	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						26	41			
						v	^			
				510	<	IN	=	1129	<	521
				567	>	OUT	=	1129	>	548
						v	^			
						30	15			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	0	7			
					<	v	>			
		8	^					^		3
		46	>					<		52
		0	v					v		0
					<	^	>			
					5	0	2			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					18	0	17			
					<	v	>			
		34	^					^		18
		575	>					<		540
		12	v					v		18
					<	^	>			
					11	0	11			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						125	**83**			
						v	^			
				945	<	IN	=	2793	<	**1206**
				1212	>	OUT	=	2793	>	**1471**
						v	^			
						294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				18	<	IN	=	43	<	**20**
				21	>	OUT	=	44	>	**24**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						35	23			
						v	^			
				269	<	IN	=	793	<	343
				345	>	OUT	=	793	>	418
						v	^			
						83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						232	**246**			
						v	^			
				1204	<	IN	=	4038	<	**1441**
				1782	>	OUT	=	4038	>	**2154**
						v	^			
						434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**2**			
						v	^			
				42	<	IN	=	97	<	**46**
				43	>	OUT	=	98	>	**48**
						v	^			
						6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						65	69			
						v	^			
				348	<	IN	=	1155	<	415
				510	>	OUT	=	1155	>	615
						v	^			
						123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						30	46			
						v	^			
				79	<			<		72
				165	>			>		197
						v	^			
						40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	50			
						v	^			
				80	<	IN	=	360	<	70
				170	>	OUT	=	370	>	200
						v	^			
						40	90			

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

						10	10			
						v	^			
				20	<			<		20
				40	>			>		50
						v	^			
						10	20			

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**40**	BOUND	THRU	**0**	IN ...	**40**
	RIGHT	**18**	OUT ...	**50**		RIGHT	**11**	OUT ...	**40**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**22**	OUT ...	**40**		RIGHT	**18**	OUT ...	**60**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**430**	BOUND	THRU	**575**	IN ...	**660**
	RIGHT	**18**	OUT ...	**610**		RIGHT	**12**	OUT ...	**590**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**610**	BOUND	THRU	**540**	IN ...	**600**
	RIGHT	**14**	OUT ...	**430**		RIGHT	**18**	OUT ...	**650**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**10**	NORTH LEG	NORTH	LEFT	**11**	**19**	NORTH LEG
BOUND	THRU	**1**	**2**	RATIO **7.5%**	BOUND	THRU	**0**	**0**	RATIO **9.1%**
	RIGHT	**18**	**28**	ADT 1,200		RIGHT	**11**	**21**	ADT 1,200
SOUTH	LEFT	**11**	**16**	SOUTH LEG	SOUTH	LEFT	**17**	**25**	SOUTH LEG
BOUND	THRU	**2**	**4**	RATIO **8.9%**	BOUND	THRU	**0**	**0**	RATIO **8.0%**
	RIGHT	**22**	**30**	ADT 1,000		RIGHT	**18**	**24**	ADT 1,000
EAST	LEFT	**19**	**20**	EAST LEG	EAST	LEFT	**34**	**38**	EAST LEG
BOUND	THRU	**387**	**394**	RATIO **7.3%**	BOUND	THRU	**575**	**604**	RATIO **8.6%**
	RIGHT	**18**	**26**	ADT 14,400		RIGHT	**12**	**15**	ADT 14,400
WEST	LEFT	**11**	**19**	WEST LEG	WEST	LEFT	**18**	**25**	WEST LEG
BOUND	THRU	**516**	**570**	RATIO **7.3%**	BOUND	THRU	**540**	**547**	RATIO **8.7%**
	RIGHT	**14**	**18**	ADT 14,400		RIGHT	**18**	**22**	ADT 14,400

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	24			
				v	^			
0	<		IN =		53	<		0
0	>		OUT =		53	>		0
				v	^			
				29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	2	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

			0	2	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	31	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	26	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				177	**183**			
				v	^			
		<	IN =		360	<		
		>	OUT =		360	>		
				v	^			
				177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
		<	IN =		4	<		
		>	OUT =		4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				68	70			
				v	^			
0	<		IN =		138	<		0
0	>		OUT =		138	>		0
				v	^			
				68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				356	**227**			
				v	^			
		<	IN =		583	<		
		>	OUT =		583	>		
				v	^			
				356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				4	**4**			
				v	^			
		<	IN =		8	<		
		>	OUT =		8	>		
				v	^			
				4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				137	88			
				v	^			
0	<		IN =		224	<		0
0	>		OUT =		224	>		0
				v	^			
				137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				69	17			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				70	20			
				v	^			
0	<		IN =		90	<		0
0	>		OUT =		90	>		0
				v	^			
				70	20			

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

				20	10			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				20	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	19	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	19			
				v	^			
0	<		IN =		48	<		0
0	>		OUT =		48	>		0
				v	^			
				29	19			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

			0	5	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				294	**250**			
				v	^			
		<	IN =		544	<		
		>	OUT =		544	>		
				v	^			
				294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
		<	IN =		4	<		
		>	OUT =		4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				83	71			
				v	^			
0	<		IN =		153	<		0
0	>		OUT =		153	>		0
				v	^			
				83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				434	**583**			
				v	^			
		<	IN =		1017	<		
		>	OUT =		1017	>		
				v	^			
				434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				6	**6**			
				v	^			
		<	IN =		12	<		
		>	OUT =		12	>		
				v	^			
				6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				123	165			
				v	^			
0	<		IN =		288	<		0
0	>		OUT =		288	>		0
				v	^			
				123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				40	94			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				40	90			
				v	^			
0	<		IN =		130	<		0
0	>		OUT =		130	>		0
				v	^			
				40	90			

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

				10	20			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				10	20			

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**40**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**40**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **9.0%**	BOUND	THRU	**24**	**40**	RATIO **8.0%**
	RIGHT	**0**	**0**	ADT 1,000		RIGHT	**0**	**0**	ADT 1,000
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **9.0%**	BOUND	THRU	**29**	**40**	RATIO **8.0%**
	RIGHT	**0**	**0**	ADT 1,000		RIGHT	**0**	**0**	ADT 1,000
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	24			
				v	^			
0	<		IN =		53	<		0
0	>		OUT =		53	>		0
				v	^			
				29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	2	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

			0	2	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	31	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	26	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				177	**183**			
				v	^			
			<	IN =	360	<		
			>	OUT =	360	>		
				v	^			
				177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				68	70			
				v	^			
0	<		IN =		138	<		0
0	>		OUT =		138	>		0
				v	^			
				68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				356	**227**			
				v	^			
			<	IN =	583	<		
			>	OUT =	583	>		
				v	^			
				356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				4	**4**			
				v	^			
			<	IN =	8	<		
			>	OUT =	8	>		
				v	^			
				4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				137	88			
				v	^			
0	<		IN =		224	<		0
0	>		OUT =		224	>		0
				v	^			
				137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				69	17			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				70	20			
				v	^			
0	<		IN =		90	<		0
0	>		OUT =		90	>		0
				v	^			
				70	20			

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

				20	10			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				20	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	19	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	19			
				v	^			
0	<		IN =		48	<		0
0	>		OUT =		48	>		0
				v	^			
				29	19			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

			0	5	0			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				294	**250**			
				v	^			
			<	IN =	544	<		
			>	OUT =	544	>		
				v	^			
				294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				83	71			
				v	^			
0	<		IN =		153	<		0
0	>		OUT =		153	>		0
				v	^			
				83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				434	**583**			
				v	^			
			<	IN =	1017	<		
			>	OUT =	1017	>		
				v	^			
				434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				6	**6**			
				v	^			
			<	IN =	12	<		
			>	OUT =	12	>		
				v	^			
				6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				123	165			
				v	^			
0	<		IN =		288	<		0
0	>		OUT =		288	>		0
				v	^			
				123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				40	94			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				40	90			
				v	^			
0	<		IN =		130	<		0
0	>		OUT =		130	>		0
				v	^			
				40	90			

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

				10	20			
				v	^			
0	<					<		0
0	>					>		0
				v	^			
				10	20			

Valle Vista Road (NS) at: Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**40**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**40**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **9.0%**	BOUND	THRU	**24**	**40**	RATIO **8.0%**
	RIGHT	**0**	**0**	ADT 1,000		RIGHT	**0**	**0**	ADT 1,000
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **9.0%**	BOUND	THRU	**29**	**40**	RATIO **8.0%**
	RIGHT	**0**	**0**	ADT 1,000		RIGHT	**0**	**0**	ADT 1,000
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
PCE FACTORS BY AXLE:					<	^	>			
2: **1.5** 3: **2.0** 4+: **3.0**					0	2	21			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**
PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: **2035**
FACTOR = **1.00**

						94	31			
						v	^			
			272	<			<		162	
			27	>			>		-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2021**
7 YEARS

						20	10			
						v	^			
			70	<			<		40	
			10	>			>		20	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
PCE FACTORS BY AXLE:					<	^	>			
2: 1.5 3: 2 4+: 3.0					3	10	15			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**
PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

						43	110			
						v	^			
			72	<			<		4	
			197	>			>		62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2021
7 YEARS

						10	30			
						v	^			
			20	<			<		20	
			50	>			>		20	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**200**	BOUND	THRU	**30**	IN ...	**140**
	RIGHT	**85**	OUT ...	**90**		RIGHT	**46**	OUT ...	**240**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**410**	BOUND	THRU	**485**	IN ...	**650**
	RIGHT	**8**	OUT ...	**590**		RIGHT	**12**	OUT ...	**530**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**610**	BOUND	THRU	**445**	IN ...	**610**
	RIGHT	**32**	OUT ...	**610**		RIGHT	**59**	OUT ...	**760**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**10**	NORTH LEG	NORTH	LEFT	**18**	**19**	NORTH LEG
BOUND	THRU	**15**	**16**	RATIO **6.8%**	BOUND	THRU	**50**	**55**	RATIO **8.8%**
	RIGHT	**190**	**193**	ADT 4,300		RIGHT	**193**	**197**	ADT 4,300
SOUTH	LEFT	**60**	**62**	SOUTH LEG	SOUTH	LEFT	**58**	**58**	SOUTH LEG
BOUND	THRU	**38**	**38**	RATIO **8.0%**	BOUND	THRU	**30**	**32**	RATIO **8.5%**
	RIGHT	**85**	**101**	ADT 4,700		RIGHT	**46**	**50**	ADT 4,700
EAST	LEFT	**36**	**41**	EAST LEG	EAST	LEFT	**98**	**120**	EAST LEG
BOUND	THRU	**344**	**363**	RATIO **7.9%**	BOUND	THRU	**485**	**516**	RATIO **8.8%**
	RIGHT	**8**	**8**	ADT 15,700		RIGHT	**12**	**13**	ADT 15,700
WEST	LEFT	**108**	**110**	WEST LEG	WEST	LEFT	**84**	**85**	WEST LEG
BOUND	THRU	**421**	**479**	RATIO **7.4%**	BOUND	THRU	**445**	**461**	RATIO **8.7%**
	RIGHT	**32**	**34**	ADT 13,500		RIGHT	**59**	**65**	ADT 13,500

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6		
				<	v	>		
		4	^				^	5
		509	>				<	483
		16	v				v	15
				<	^	>		
				25	2	29		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11		
					v	^		
		514	<	IN =	1101	<		503
		529	>	OUT =	1101	>		544
					v	^		
					32	56		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	3
		82	>				<	89
		4	v				v	2
				<	^	>		
				0	0	4		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6		
				<	v	>		
		4	^				^	8
		591	>				<	572
		20	v				v	17
				<	^	>		
				25	2	33		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		997	<	IN =	1768	<		**997**
		771	>	OUT =	1768	>		**771**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		14	<	IN =	28	<		**14**
		14	>	OUT =	28	>		**14**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		384	<	IN =	681	<		384
		298	>	OUT =	681	>		298
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1408	<	IN =	2121	<		**1408**
		713	>	OUT =	2121	>		**713**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		31	<	IN =	48	<		**31**
		17	>	OUT =	48	>		**17**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		545	<	IN =	822	<		545
		277	>	OUT =	822	>		277
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0		
					v	^		
		162	<			<		162
		-21	>			>		-21
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		160	<	IN =	220	<		160
		60	>	OUT =	220	>		60
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2014 TO **2021**

7 YEARS

					0	0		
					v	^		
		40	<			<		40
		20	>			>		20
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5		
				<	v	>		
		10	^				^	4
		589	>				<	537
		50	v				v	33
				<	^	>		
				26	0	15		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14		
					v	^		
		569	<	IN =	1275	<		574
		649	>	OUT =	1275	>		609
					v	^		
					83	41		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0		
				<	v	>		
		0	^				^	2
		84	>				<	35
		2	v				v	5
				<	^	>		
				2	0	3		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5		
				<	v	>		
		10	^				^	6
		673	>				<	572
		52	v				v	38
				<	^	>		
				28	0	18		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		1333	<	IN =	2884	<		**1333**
		1551	>	OUT =	2884	>		**1551**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		21	<	IN =	46	<		**21**
		25	>	OUT =	46	>		**25**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		378	<	IN =	819	<		378
		441	>	OUT =	819	>		441
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1330	<	IN =	3088	<		**1330**
		1758	>	OUT =	3088	>		**1758**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		41	<	IN =	82	<		**41**
		41	>	OUT =	82	>		**41**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		383	<	IN =	885	<		383
		502	>	OUT =	885	>		502
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0		
					v	^		
		4	<			<		4
		62	>			>		62
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		60	<	IN =	130	<		60
		70	>	OUT =	130	>		70
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2014 TO 2021

7 YEARS

					0	0		
					v	^		
		20	<			<		20
		20	>			>		20
					v	^		
					0	0		

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**640**	BOUND	THRU	**673**	IN ...	**760**
	RIGHT	**20**	OUT ...	**640**		RIGHT	**52**	OUT ...	**630**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**640**	BOUND	THRU	**572**	IN ...	**640**
	RIGHT	**8**	OUT ...	**650**		RIGHT	**6**	OUT ...	**720**

OPENING YEAR (2021) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**26**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**33**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **5.9%**	BOUND	THRU	**2**	**2**	RATIO **8.5%**
	RIGHT	**6**	**6**	ADT 1,700		RIGHT	**8**	**11**	ADT 1,700
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**612**	RATIO **8.3%**	BOUND	THRU	**673**	**693**	RATIO **8.7%**
	RIGHT	**20**	**20**	ADT 15,600		RIGHT	**52**	**53**	ADT 15,600
WEST	LEFT	**17**	**18**	WEST LEG	WEST	LEFT	**38**	**39**	WEST LEG
BOUND	THRU	**572**	**611**	RATIO **8.0%**	BOUND	THRU	**572**	**590**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 15,900		RIGHT	**6**	**8**	ADT 15,900

Opening Year (2022)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					17	9				
					v	^				
		152	<	IN	=	632	<	304		
		249	>	OUT	=	632	>	274		
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
				<	^	>				
				2	0	20				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					374	**166**				
					v	^				
		177	<	IN	=	1173	<	**197**		
		327	>	OUT	=	1173	>	**311**		
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					3	**3**				
					v	^				
		7	<	IN	=	22	<	**8**		
		7	>	OUT	=	21	>	**7**		
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					143	64				
					v	^				
		70	<	IN	=	453	<	78		
		127	>	OUT	=	453	>	121		
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					613	**273**				
					v	^				
		263	<	IN	=	1517	<	**288**		
		314	>	OUT	=	1517	>	**312**		
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**5**				
					v	^				
		14	<	IN	=	38	<	**15**		
		11	>	OUT	=	38	>	**11**		
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					235	105				
					v	^				
		105	<	IN	=	589	<	114		
		123	>	OUT	=	589	>	122		
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					92	41				
					v	^				
		35	<				<	37		
		-4	>				>	2		
					v	^				
					58	11				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					90	40				
					v	^				
		40	<	IN	=	170	<	40		
		30	>	OUT	=	170	>	30		
					v	^				
					60	10				

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

					30	10				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					20	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	21				
					v	^				
		261	<	IN	=	773	<	467		
		242	>	OUT	=	773	>	262		
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
				<	^	>				
				0	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					346	**524**				
					v	^				
		490	<	IN	=	2005	<	**500**		
		446	>	OUT	=	2004	>	**450**		
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					5	**5**				
					v	^				
		9	<	IN	=	36	<	**9**		
		16	>	OUT	=	36	>	**16**		
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					98	148				
					v	^				
		139	<	IN	=	570	<	142		
		129	>	OUT	=	570	>	130		
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					537	**783**				
					v	^				
		673	<	IN	=	2578	<	**540**		
		509	>	OUT	=	2578	>	**483**		
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**7**				
					v	^				
		23	<	IN	=	64	<	**23**		
		25	>	OUT	=	63	>	**25**		
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					152	221				
					v	^				
		194	<	IN	=	738	<	157		
		149	>	OUT	=	738	>	141		
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					54	73				
					v	^				
		55	<				<	15		
		20	>				>	11		
					v	^				
					28	79				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	70				
					v	^				
		50	<	IN	=	210	<	50		
		30	>	OUT	=	180	>	30		
					v	^				
					30	80				

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

					10	20				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					10	20				

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH BOUND	LEFT	**16**	SOUTH LEG		NORTH BOUND	LEFT	**14**	SOUTH LEG	
	THRU	**3**	IN ...	**80**		THRU	**5**	IN ...	**80**
	RIGHT	**65**	OUT ...	**260**		RIGHT	**37**	OUT ...	**270**
SOUTH BOUND	LEFT	**5**	NORTH LEG		SOUTH BOUND	LEFT	**7**	NORTH LEG	
	THRU	**12**	IN ...	**50**		THRU	**3**	IN ...	**20**
	RIGHT	**0**	OUT ...	**20**		RIGHT	**1**	OUT ...	**40**
EAST BOUND	LEFT	**3**	WEST LEG		EAST BOUND	LEFT	**2**	WEST LEG	
	THRU	**277**	IN ...	**320**		THRU	**264**	IN ...	**300**
	RIGHT	**30**	OUT ...	**230**		RIGHT	**21**	OUT ...	**300**
WEST BOUND	LEFT	**202**	EAST LEG		WEST BOUND	LEFT	**240**	EAST LEG	
	THRU	**202**	IN ...	**420**		THRU	**279**	IN ...	**540**
	RIGHT	**7**	OUT ...	**360**		RIGHT	**14**	OUT ...	**320**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	**16**	**16**	NORTH LEG	NORTH BOUND	LEFT	**14**	**21**	NORTH LEG
	THRU	**3**	**4**	RATIO **8.8%**		THRU	**5**	**13**	RATIO **7.4%**
	RIGHT	**65**	**65**	ADT 800		RIGHT	**37**	**45**	ADT 800
SOUTH BOUND	LEFT	**5**	**15**	SOUTH LEG	SOUTH BOUND	LEFT	**7**	**11**	SOUTH LEG
	THRU	**12**	**35**	RATIO **8.8%**		THRU	**3**	**6**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 4,000		RIGHT	**1**	**2**	ADT 4,000
EAST BOUND	LEFT	**3**	**5**	EAST LEG	EAST BOUND	LEFT	**2**	**4**	EAST LEG
	THRU	**277**	**278**	RATIO **7.8%**		THRU	**264**	**264**	RATIO **8.5%**
	RIGHT	**30**	**30**	ADT 10,100		RIGHT	**21**	**26**	ADT 10,100
WEST BOUND	LEFT	**202**	**203**	WEST LEG	WEST BOUND	LEFT	**240**	**240**	WEST LEG
	THRU	**202**	**214**	RATIO **7.8%**		THRU	**279**	**279**	RATIO **8.5%**
	RIGHT	**7**	**11**	ADT 7,000		RIGHT	**14**	**23**	ADT 7,000

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
			15	^				^	24	
			245	>				<	249	
			36	v				v	14	
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
			297	<	IN	=	686	<	287	
			296	>	OUT	=	686	>	292	
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
			2	^				^	7	
			54	>				<	158	
			2	v				v	12	
					<	^	>			
					9	0	5			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
			17	^				^	31	
			299	>				<	407	
			38	v				v	26	
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			197	<	IN	=	510	<	**197**	
			311	>	OUT	=	511	>	**314**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			8	<	IN	=	17	<	**8**	
			7	>	OUT	=	18	>	**10**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
			78	<	IN	=	199	<	78	
			121	>	OUT	=	200	>	123	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			290	<	IN	=	646	<	**290**	
			354	>	OUT	=	646	>	**356**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
			15	<	IN	=	27	<	**15**	
			11	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
			115	<	IN	=	254	<	115	
			138	>	OUT	=	255	>	140	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						0	0			
						v	^			
			38	<				<	38	
			18	>				>	17	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						0	10			
						v	^			
			50	<	IN	=	90	<	50	
			40	>	OUT	=	100	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

						0	0			
						v	^			
			10	<				<	10	
			10	>				>	10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
			28	^				^	83	
			224	>				<	404	
			33	v				v	50	
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
			506	<	IN	=	1083	<	537	
			285	>	OUT	=	1083	>	323	
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
			2	^				^	7	
			33	>				<	46	
			3	v				v	6	
					<	^	>			
					14	3	6			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
			30	^				^	90	
			257	>				<	450	
			36	v				v	56	
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			500	<	IN	=	952	<	**500**	
			450	>	OUT	=	954	>	**454**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			9	<	IN	=	27	<	**9**	
			16	>	OUT	=	29	>	**20**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
			142	<	IN	=	273	<	142	
			130	>	OUT	=	274	>	132	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			616	<	IN	=	1138	<	**616**	
			520	>	OUT	=	1140	>	**524**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**0**			
						v	^			
			23	<	IN	=	51	<	**23**	
			26	>	OUT	=	52	>	**29**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
			178	<	IN	=	331	<	178	
			152	>	OUT	=	332	>	154	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						0	0			
						v	^			
			36	<				<	36	
			22	>				>	22	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						10	10			
						v	^			
			60	<	IN	=	100	<	60	
			30	>	OUT	=	110	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

						0	0			
						v	^			
			20	<				<	20	
			10	>				>	10	
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**360**	BOUND	THRU	**257**	IN ...	**330**
	RIGHT	**38**	OUT ...	**470**		RIGHT	**36**	OUT ...	**590**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**470**	BOUND	THRU	**450**	IN ...	**620**
	RIGHT	**31**	OUT ...	**370**		RIGHT	**90**	OUT ...	**370**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**41**	NORTH LEG	NORTH	LEFT	**89**	**91**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.1%**	BOUND	THRU	**27**	**27**	RATIO **8.5%**
	RIGHT	**43**	**44**	ADT 2,900		RIGHT	**81**	**82**	ADT 2,900
SOUTH	LEFT	**14**	**14**	SOUTH LEG	SOUTH	LEFT	**26**	**27**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.1%**	BOUND	THRU	**38**	**39**	RATIO **8.5%**
	RIGHT	**17**	**18**	ADT 3,900		RIGHT	**29**	**30**	ADT 3,900
EAST	LEFT	**17**	**18**	EAST LEG	EAST	LEFT	**30**	**31**	EAST LEG
BOUND	THRU	**299**	**310**	RATIO **7.4%**	BOUND	THRU	**257**	**263**	RATIO **8.7%**
	RIGHT	**38**	**39**	ADT 11,400		RIGHT	**36**	**36**	ADT 11,400
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**57**	WEST LEG
BOUND	THRU	**407**	**416**	RATIO **7.9%**	BOUND	THRU	**450**	**471**	RATIO **8.7%**
	RIGHT	**31**	**32**	ADT 10,600		RIGHT	**90**	**92**	ADT 10,600

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				77	86	94		
				<	v	>		
		39	^				^	29
		214	>				<	300
		32	v				v	122
				<	^	>		
				52	92	101		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					257	160		
					v	^		
		429	<	IN	=	1238	<	451
		285	>	OUT	=	1238	>	409
					v	^		
					240	245		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				13	5	20		
				<	v	>		
		9	^				^	3
		56	>				<	68
		8	v				v	5
				<	^	>		
				15	20	18		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				90	91	114		
				<	v	>		
		48	^				^	32
		270	>				<	368
		40	v				v	127
				<	^	>		
				67	112	119		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					720	**305**		
					v	^		
		197	<	IN	=	2198	<	**793**
		314	>	OUT	=	2197	>	**502**
					v	^		
					1193	**371**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					7	**10**		
					v	^		
		8	<	IN	=	41	<	**13**
		10	>	OUT	=	40	>	**12**
					v	^		
					10	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					276	119		
					v	^		
		78	<	IN	=	849	<	306
		123	>	OUT	=	848	>	195
					v	^		
					457	145		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					674	**289**		
					v	^		
		290	<	IN	=	2869	<	**1412**
		356	>	OUT	=	2867	>	**586**
					v	^		
					1702	**427**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					11	**8**		
					v	^		
		15	<	IN	=	71	<	**35**
		14	>	OUT	=	69	>	**17**
					v	^		
					29	**11**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					260	112		
					v	^		
		115	<	IN	=	1114	<	548
		140	>	OUT	=	1112	>	228
					v	^		
					656	166		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					-16	-7		
					v	^		
		38	<			<		243
		17	>			>		34
					v	^		
					200	21		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	20		
					v	^		
		50	<	IN	=	330	<	240
		40	>	OUT	=	320	>	50
					v	^		
					200	20		

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

					10	10		
					v	^		
		10	<			<		70
		10	>			>		10
					v	^		
					60	10		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				95	87	111		
				<	v	>		
		83	^				^	45
		270	>				<	363
		36	v				v	99
				<	^	>		
				106	145	171		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					293	273		
					v	^		
		564	<	IN	=	1611	<	507
		389	>	OUT	=	1611	>	552
					v	^		
					222	422		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				12	4	7		
				<	v	>		
		2	^				^	10
		40	>				<	50
		0	v				v	9
				<	^	>		
				5	14	17		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				107	91	118		
				<	v	>		
		85	^				^	55
		310	>				<	413
		36	v				v	108
				<	^	>		
				111	159	188		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					588	**830**		
					v	^		
		500	<	IN	=	3381	<	**945**
		454	>	OUT	=	3378	>	**1212**
					v	^		
					836	**1394**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					12	**10**		
					v	^		
		9	<	IN	=	61	<	**18**
		20	>	OUT	=	58	>	**21**
					v	^		
					18	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					168	235		
					v	^		
		142	<	IN	=	962	<	269
		132	>	OUT	=	960	>	345
					v	^		
					239	393		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					541	**809**		
					v	^		
		616	<	IN	=	4205	<	**1204**
		524	>	OUT	=	4204	>	**1782**
					v	^		
					997	**1936**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					12	**16**		
					v	^		
		23	<	IN	=	113	<	**42**
		29	>	OUT	=	110	>	**43**
					v	^		
					28	**30**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					154	231		
					v	^		
		178	<	IN	=	1206	<	348
		154	>	OUT	=	1205	>	510
					v	^		
					286	550		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					-13	-4		
					v	^		
		36	<			<		79
		22	>			>		165
					v	^		
					48	157		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	30		
					v	^		
		60	<	IN	=	310	<	80
		40	>	OUT	=	310	>	170
					v	^		
					50	160		

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

					10	10		
					v	^		
		20	<			<		20
		10	>			>		50
					v	^		
					10	50		

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**310**	BOUND	THRU	**159**	IN ...	**510**
	RIGHT	**119**	OUT ...	**320**		RIGHT	**188**	OUT ...	**250**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**310**	BOUND	THRU	**91**	IN ...	**330**
	RIGHT	**90**	OUT ...	**200**		RIGHT	**107**	OUT ...	**310**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**370**	BOUND	THRU	**310**	IN ...	**440**
	RIGHT	**40**	OUT ...	**550**		RIGHT	**36**	OUT ...	**650**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**600**	BOUND	THRU	**413**	IN ...	**600**
	RIGHT	**32**	OUT ...	**520**		RIGHT	**55**	OUT ...	**670**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**69**	NORTH LEG	NORTH	LEFT	**111**	**119**	NORTH LEG
BOUND	THRU	**112**	**116**	RATIO **7.0%**	BOUND	THRU	**159**	**171**	RATIO **8.8%**
	RIGHT	**119**	**127**	ADT 7,400		RIGHT	**188**	**220**	ADT 7,400
SOUTH	LEFT	**114**	**117**	SOUTH LEG	SOUTH	LEFT	**118**	**128**	SOUTH LEG
BOUND	THRU	**91**	**106**	RATIO **7.4%**	BOUND	THRU	**91**	**96**	RATIO **8.9%**
	RIGHT	**90**	**92**	ADT 8,500		RIGHT	**107**	**109**	ADT 8,500
EAST	LEFT	**48**	**49**	EAST LEG	EAST	LEFT	**85**	**88**	EAST LEG
BOUND	THRU	**270**	**276**	RATIO **7.7%**	BOUND	THRU	**310**	**322**	RATIO **8.8%**
	RIGHT	**40**	**46**	ADT 14,500		RIGHT	**36**	**36**	ADT 14,500
WEST	LEFT	**127**	**167**	WEST LEG	WEST	LEFT	**108**	**118**	WEST LEG
BOUND	THRU	**368**	**397**	RATIO **7.3%**	BOUND	THRU	**413**	**425**	RATIO **8.7%**
	RIGHT	**32**	**36**	ADT 12,700		RIGHT	**55**	**57**	ADT 12,700

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				58	168	13		
				<	v	>		
		21	^				^	21
		39	>				<	87
		22	v				v	71
				<	^	>		
				58	268	125		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					239	310		
					v	^		
		203	<	IN	=	951	<	179
		82	>	OUT	=	951	>	177
					v	^		
					261	451		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				6	11	4		
				<	v	>		
		11	^				^	3
		7	>				<	5
		5	v				v	9
PCE FACTORS BY AXLE:				<	^	>		
2: **1.5** 3: **2.0** 4+: **3.0**				7	25	24		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				64	179	17		
				<	v	>		
		32	^				^	24
		46	>				<	92
		27	v				v	80
				<	^	>		
				65	293	149		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					1193	**371**		
					v	^		
		694	<	IN	=	1564	<	**0**
		76	>	OUT	=	1564	>	**0**
					v	^		
					499	**295**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					10	**11**		
					v	^		
		0	<	IN	=	20	<	**0**
		0	>	OUT	=	21	>	**0**
					v	^		
					10	**10**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					457	145		
					v	^		
		264	<	IN	=	601	<	0
		29	>	OUT	=	601	>	0
					v	^		
					193	115		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					1702	**427**		
					v	^		
		754	<	IN	=	2129	<	**0**
		97	>	OUT	=	2129	>	**0**
					v	^		
					948	**330**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					29	**11**		
					v	^		
		1	<	IN	=	40	<	**0**
		1	>	OUT	=	40	>	**0**
					v	^		
					28	**10**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					656	166		
					v	^		
		287	<	IN	=	822	<	0
		37	>	OUT	=	822	>	0
					v	^		
					370	129		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					200	21		
					v	^		
		23	<			<		0
		8	>			>		0
					v	^		
					177	13		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					200	30		
					v	^		
		20	<	IN	=	240	<	20
		10	>	OUT	=	250	>	20
					v	^		
					180	10		

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

					60	10		
					v	^		
		10	<			<		10
		0	>			>		10
					v	^		
					50	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				90	92	14		
				<	v	>		
		28	^				^	30
		35	>				<	50
		19	v				v	51
				<	^	>		
				54	359	193		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					196	417		
					v	^		
		194	<	IN	=	1015	<	131
		82	>	OUT	=	1015	>	242
					v	^		
					162	606		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				5	5	2		
				<	v	>		
		0	^				^	3
		2	>				<	2
		0	v				v	0
PCE FACTORS BY AXLE:				<	^	>		
2: 1.5 3: 2 4+: 3.0				2	46	30		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				95	97	16		
				<	v	>		
		28	^				^	33
		37	>				<	52
		19	v				v	51
				<	^	>		
				56	405	223		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					836	**1394**		
					v	^		
		178	<	IN	=	2229	<	**0**
		677	>	OUT	=	2230	>	**0**
					v	^		
					658	**716**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					18	**11**		
					v	^		
		1	<	IN	=	30	<	**0**
		1	>	OUT	=	29	>	**0**
					v	^		
					17	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					239	393		
					v	^		
		50	<	IN	=	632	<	0
		190	>	OUT	=	632	>	0
					v	^		
					188	203		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					997	**1936**		
					v	^		
		212	<	IN	=	2933	<	**0**
		745	>	OUT	=	2933	>	**0**
					v	^		
					785	**1191**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					28	**30**		
					v	^		
		1	<	IN	=	58	<	**0**
		1	>	OUT	=	58	>	**0**
					v	^		
					27	**29**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					286	550		
					v	^		
		60	<	IN	=	836	<	0
		209	>	OUT	=	836	>	0
					v	^		
					227	341		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					48	157		
					v	^		
		10	<			<		0
		19	>			>		0
					v	^		
					38	138		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	160		
					v	^		
		20	<	IN	=	220	<	10
		20	>	OUT	=	250	>	30
					v	^		
					40	140		

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

					10	50		
					v	^		
		10	<			<		0
		10	>			>		10
					v	^		
					10	40		

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**740**
	RIGHT	**149**	OUT ...	**340**		RIGHT	**223**	OUT ...	**180**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**320**	BOUND	THRU	**97**	IN ...	**230**
	RIGHT	**64**	OUT ...	**360**		RIGHT	**95**	OUT ...	**520**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**90**
	RIGHT	**27**	OUT ...	**230**		RIGHT	**19**	OUT ...	**210**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**210**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**220**		RIGHT	**33**	OUT ...	**290**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**67**	NORTH LEG	NORTH	LEFT	**56**	**58**	NORTH LEG
BOUND	THRU	**293**	**299**	RATIO **8.2%**	BOUND	THRU	**405**	**452**	RATIO **9.0%**
	RIGHT	**149**	**150**	ADT 8,300		RIGHT	**223**	**233**	ADT 8,300
SOUTH	LEFT	**17**	**21**	SOUTH LEG	SOUTH	LEFT	**16**	**18**	SOUTH LEG
BOUND	THRU	**179**	**224**	RATIO **8.4%**	BOUND	THRU	**97**	**108**	RATIO **9.0%**
	RIGHT	**64**	**75**	ADT 10,200		RIGHT	**95**	**103**	ADT 10,200
EAST	LEFT	**32**	**34**	EAST LEG	EAST	LEFT	**28**	**31**	EAST LEG
BOUND	THRU	**46**	**48**	RATIO **8.7%**	BOUND	THRU	**37**	**39**	RATIO **8.8%**
	RIGHT	**27**	**28**	ADT 4,900		RIGHT	**19**	**20**	ADT 4,900
WEST	LEFT	**80**	**88**	WEST LEG	WEST	LEFT	**51**	**52**	WEST LEG
BOUND	THRU	**92**	**94**	RATIO **10.2%**	BOUND	THRU	**52**	**54**	RATIO **9.0%**
	RIGHT	**24**	**27**	ADT 3,400		RIGHT	**33**	**37**	ADT 3,400

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		402	>				<	575
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1		
					v	^		
		578	<	IN =		1001	<	586
		404	>	OUT =		1001	>	410
					v	^		
					12	9		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		64	>				<	52
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		466	>				<	627
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		793	<	IN =		1295	<	**793**
		502	>	OUT =		1295	>	**502**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		13	<	IN =		25	<	**13**
		12	>	OUT =		25	>	**12**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		306	<	IN =		500	<	306
		195	>	OUT =		500	>	195
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1412	<	IN =		1998	<	**1412**
		586	>	OUT =		1998	>	**586**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		35	<	IN =		52	<	**35**
		17	>	OUT =		52	>	**17**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		548	<	IN =		777	<	548
		228	>	OUT =		777	>	228
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0		
					v	^		
		243	<				<	243
		34	>				>	34
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		240	<	IN =		290	<	240
		50	>	OUT =		290	>	50
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO **2022**

6 YEARS

					0	0		
					v	^		
		50	<				<	50
		10	>				>	10
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		637	>				<	524
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5		
					v	^		
		536	<	IN =		1206	<	540
		642	>	OUT =		1206	>	649
					v	^		
					16	17		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		61	>				<	24
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		698	>				<	548
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		945	<	IN =		2157	<	**945**
		1212	>	OUT =		2157	>	**1212**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		18	<	IN =		39	<	**18**
		21	>	OUT =		39	>	**21**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		269	<	IN =		614	<	269
		345	>	OUT =		614	>	345
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1204	<	IN =		2986	<	**1204**
		1782	>	OUT =		2986	>	**1782**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		42	<	IN =		85	<	**42**
		43	>	OUT =		85	>	**43**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		348	<	IN =		857	<	348
		510	>	OUT =		857	>	510
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0		
					v	^		
		79	<				<	79
		165	>				>	165
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		80	<	IN =		250	<	80
		170	>	OUT =		250	>	170
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO 2022

6 YEARS

					0	0		
					v	^		
		20	<				<	20
		40	>				>	40
					v	^		
					0	0		

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**480**	BOUND	THRU	**698**	IN ...	**750**
	RIGHT	**2**	OUT ...	**690**		RIGHT	**2**	OUT ...	**580**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**690**	BOUND	THRU	**548**	IN ...	**580**
	RIGHT	**1**	OUT ...	**480**		RIGHT	**2**	OUT ...	**750**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**474**	RATIO **8.4%**	BOUND	THRU	**698**	**735**	RATIO **9.5%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**686**	RATIO **8.3%**	BOUND	THRU	**548**	**564**	RATIO **9.4%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <		419	
			359 >	OUT =	778 >		359	
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <		**793**	
			502 >	OUT =	1295 >		**502**	
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <		**13**	
			12 >	OUT =	25 >		**12**	
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <		306	
			195 >	OUT =	500 >		195	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <		**1412**	
			586 >	OUT =	1998 >		**586**	
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <		**35**	
			17 >	OUT =	52 >		**17**	
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <		548	
			228 >	OUT =	777 >		228	
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<		243	
			34 >		>		34	
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <		240	
			40 >	OUT =	280 >		40	
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

				0	0			
				v	^			
			70 <		<		70	
			10 >		>		10	
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <		510	
			567 >	OUT =	1077 >		567	
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <		**945**	
			1212 >	OUT =	2157 >		**1212**	
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <		**18**	
			21 >	OUT =	39 >		**21**	
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <		269	
			345 >	OUT =	614 >		345	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <		**1204**	
			1782 >	OUT =	2986 >		**1782**	
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <		**42**	
			43 >	OUT =	85 >		**43**	
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <		348	
			510 >	OUT =	857 >		510	
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<		79	
			165 >		>		165	
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <		80	
			170 >	OUT =	250 >		170	
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

				0	0			
				v	^			
			20 <		<		20	
			50 >		>		50	
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**670**
	RIGHT	**0**	OUT ...	**610**		RIGHT	**0**	OUT ...	**590**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**610**	BOUND	THRU	**568**	IN ...	**590**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**670**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**670**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,500		RIGHT	**0**	**0**	ADT 14,500
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**610**	RATIO **7.2%**	BOUND	THRU	**568**	**590**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,500		RIGHT	**0**	**0**	ADT 14,500

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

				0	0			
				v	^			
			70 <		<	70		
			10 >		>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

				0	0			
				v	^			
			20 <		<	20		
			50 >		>	50		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**670**
	RIGHT	**0**	OUT ...	**610**		RIGHT	**0**	OUT ...	**590**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**610**	BOUND	THRU	**568**	IN ...	**590**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**670**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**670**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,500		RIGHT	**0**	**0**	ADT 14,500
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**610**	RATIO **7.2%**	BOUND	THRU	**568**	**590**	RATIO **8.7%**
	RIGHT	**0**	**0**	ADT 14,500		RIGHT	**0**	**0**	ADT 14,500

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				14	2	9				
				<	v	>				
		19	^				^	11		
		324	>				<	400		
		16	v				v	11		
				<	^	>				
				5	1	18				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					25	31				
					v	^				
		419	<	IN	=	830	<	422		
		359	>	OUT	=	830	>	351		
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				8	0	2				
				<	v	>				
		0	^				^	3		
		63	>				<	116		
		2	v				v	0		
				<	^	>				
				2	0	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				22	2	11				
				<	v	>				
		19	^				^	14		
		387	>				<	516		
		18	v				v	11		
				<	^	>				
				7	1	18				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					53	**81**				
					v	^				
		793	<	IN	=	1721	<	**983**		
		502	>	OUT	=	1720	>	**669**		
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		13	<	IN	=	28	<	**14**		
		12	>	OUT	=	28	>	**13**		
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					20	31				
					v	^				
		306	<	IN	=	663	<	378		
		195	>	OUT	=	663	>	259		
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					141	**129**				
					v	^				
		1412	<	IN	=	2632	<	**1678**		
		586	>	OUT	=	2632	>	**735**		
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					1	**1**				
					v	^				
		35	<	IN	=	60	<	**38**		
		17	>	OUT	=	60	>	**20**		
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					54	49				
					v	^				
		548	<	IN	=	1020	<	650		
		228	>	OUT	=	1020	>	286		
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					34	19				
					v	^				
		243	<				<	272		
		34	>				>	27		
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	20				
					v	^				
		240	<	IN	=	360	<	270		
		40	>	OUT	=	370	>	40		
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

					10	10				
					v	^				
		70	<				<	80		
		10	>				>	10		
					v	^				
					20	10				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				16	0	10				
				<	v	>				
		26	^				^	15		
		529	>				<	488		
		12	v				v	18		
				<	^	>				
				6	0	9				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					26	41				
					v	^				
		510	<	IN	=	1129	<	521		
		567	>	OUT	=	1129	>	548		
					v	^				
					30	15				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	0	7				
				<	v	>				
		8	^				^	3		
		46	>				<	52		
		0	v				v	0		
				<	^	>				
				5	0	2				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				18	0	17				
				<	v	>				
		34	^				^	18		
		575	>				<	540		
		12	v				v	18		
				<	^	>				
				11	0	11				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					125	**83**				
					v	^				
		945	<	IN	=	2793	<	**1206**		
		1212	>	OUT	=	2793	>	**1471**		
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		18	<	IN	=	43	<	**20**		
		21	>	OUT	=	44	>	**24**		
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					35	23				
					v	^				
		269	<	IN	=	793	<	343		
		345	>	OUT	=	793	>	418		
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					232	**246**				
					v	^				
		1204	<	IN	=	4038	<	**1441**		
		1782	>	OUT	=	4038	>	**2154**		
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					2	**2**				
					v	^				
		42	<	IN	=	97	<	**46**		
		43	>	OUT	=	98	>	**48**		
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					65	69				
					v	^				
		348	<	IN	=	1155	<	415		
		510	>	OUT	=	1155	>	615		
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					30	46				
					v	^				
		79	<				<	72		
		165	>				>	197		
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					30	50				
					v	^				
		80	<	IN	=	360	<	70		
		170	>	OUT	=	370	>	200		
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

					10	10				
					v	^				
		20	<				<	20		
		50	>				>	60		
					v	^				
					10	30				

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**40**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**18**	OUT ...	**50**		RIGHT	**11**	OUT ...	**40**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**22**	OUT ...	**40**		RIGHT	**18**	OUT ...	**60**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**430**	BOUND	THRU	**575**	IN ...	**670**
	RIGHT	**18**	OUT ...	**620**		RIGHT	**12**	OUT ...	**600**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**620**	BOUND	THRU	**540**	IN ...	**600**
	RIGHT	**14**	OUT ...	**430**		RIGHT	**18**	OUT ...	**670**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**10**	NORTH LEG	NORTH	LEFT	**11**	**24**	NORTH LEG
BOUND	THRU	**1**	**2**	RATIO **7.5%**	BOUND	THRU	**0**	**0**	RATIO **9.2%**
	RIGHT	**18**	**28**	ADT 1,200		RIGHT	**11**	**26**	ADT 1,200
SOUTH	LEFT	**11**	**16**	SOUTH LEG	SOUTH	LEFT	**17**	**26**	SOUTH LEG
BOUND	THRU	**2**	**4**	RATIO **8.2%**	BOUND	THRU	**0**	**0**	RATIO **8.2%**
	RIGHT	**22**	**30**	ADT 1,100		RIGHT	**18**	**24**	ADT 1,100
EAST	LEFT	**19**	**20**	EAST LEG	EAST	LEFT	**34**	**39**	EAST LEG
BOUND	THRU	**387**	**394**	RATIO **7.3%**	BOUND	THRU	**575**	**618**	RATIO **8.7%**
	RIGHT	**18**	**26**	ADT 14,500		RIGHT	**12**	**16**	ADT 14,500
WEST	LEFT	**11**	**20**	WEST LEG	WEST	LEFT	**18**	**24**	WEST LEG
BOUND	THRU	**516**	**580**	RATIO **7.3%**	BOUND	THRU	**540**	**552**	RATIO **8.8%**
	RIGHT	**14**	**18**	ADT 14,500		RIGHT	**18**	**21**	ADT 14,500

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0		
				<	v	>		
0	^						^	0
0	>						<	0
0	v						v	0
				<	^	>		
				0	24	0		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24		
					v	^		
0	<			IN =		53	<	0
0	>			OUT =		53	>	0
					v	^		
					29	24		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0		
				<	v	>		
0	^						^	0
0	>						<	0
0	v						v	0
				<	^	>		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

				0	2	0		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0		
				<	v	>		
0	^						^	0
0	>						<	0
0	v						v	0
				<	^	>		
				0	26	0		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**		
					v	^		
				<	IN =	360	<	
				>	OUT =	360	>	
					v	^		
					177	**183**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**		
					v	^		
				<	IN =	4	<	
				>	OUT =	4	>	
					v	^		
					2	**2**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70		
					v	^		
0	<			IN =		138	<	0
0	>			OUT =		138	>	0
					v	^		
					68	70		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**		
					v	^		
				<	IN =	583	<	
				>	OUT =	583	>	
					v	^		
					356	**227**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**		
					v	^		
				<	IN =	8	<	
				>	OUT =	8	>	
					v	^		
					4	**4**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88		
					v	^		
0	<			IN =		224	<	0
0	>			OUT =		224	>	0
					v	^		
					137	88		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17		
					v	^		
0	<						<	0
0	>						>	0
					v	^		
					69	17		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20		
					v	^		
0	<			IN =		90	<	0
0	>			OUT =		90	>	0
					v	^		
					70	20		

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

					20	10		
					v	^		
0	<						<	0
0	>						>	0
					v	^		
					20	10		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0		
				<	v	>		
0	^						^	0
0	>						<	0
0	v						v	0
				<	^	>		
				0	19	0		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19		
					v	^		
0	<			IN =		48	<	0
0	>			OUT =		48	>	0
					v	^		
					29	19		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
0	^						^	0
0	>						<	0
0	v						v	0
				<	^	>		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

				0	5	0		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0		
				<	v	>		
0	^						^	0
0	>						<	0
0	v						v	0
				<	^	>		
				0	24	0		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**		
					v	^		
				<	IN =	544	<	
				>	OUT =	544	>	
					v	^		
					294	**250**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**		
					v	^		
				<	IN =	4	<	
				>	OUT =	4	>	
					v	^		
					2	**2**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71		
					v	^		
0	<			IN =		153	<	0
0	>			OUT =		153	>	0
					v	^		
					83	71		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**		
					v	^		
				<	IN =	1017	<	
				>	OUT =	1017	>	
					v	^		
					434	**583**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**		
					v	^		
				<	IN =	12	<	
				>	OUT =	12	>	
					v	^		
					6	**6**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165		
					v	^		
0	<			IN =		288	<	0
0	>			OUT =		288	>	0
					v	^		
					123	165		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94		
					v	^		
0	<						<	0
0	>						>	0
					v	^		
					40	94		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90		
					v	^		
0	<			IN =		130	<	0
0	>			OUT =		130	>	0
					v	^		
					40	90		

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

					10	30		
					v	^		
0	<						<	0
0	>						>	0
					v	^		
					10	30		

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**50**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**50**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **8.2%**	BOUND	THRU	**24**	**50**	RATIO **8.2%**
	RIGHT	**0**	**0**	ADT 1,100		RIGHT	**0**	**0**	ADT 1,100
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **8.2%**	BOUND	THRU	**29**	**40**	RATIO **8.2%**
	RIGHT	**0**	**0**	ADT 1,100		RIGHT	**0**	**0**	ADT 1,100
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24				
					v	^				
		0	<	IN =		53	<	0		
		0	>	OUT =		53	>	0		
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	2	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	26	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**				
					v	^				
			<	IN =		360	<			
			>	OUT =		360	>			
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70				
					v	^				
		0	<	IN =		138	<	0		
		0	>	OUT =		138	>	0		
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**				
					v	^				
			<	IN =		583	<			
			>	OUT =		583	>			
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**				
					v	^				
			<	IN =		8	<			
			>	OUT =		8	>			
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88				
					v	^				
		0	<	IN =		224	<	0		
		0	>	OUT =		224	>	0		
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20				
					v	^				
		0	<	IN =		90	<	0		
		0	>	OUT =		90	>	0		
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

					20	10				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					20	10				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	19	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19				
					v	^				
		0	<	IN =		48	<	0		
		0	>	OUT =		48	>	0		
					v	^				
					29	19				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	5	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**				
					v	^				
			<	IN =		544	<			
			>	OUT =		544	>			
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71				
					v	^				
		0	<	IN =		153	<	0		
		0	>	OUT =		153	>	0		
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**				
					v	^				
			<	IN =		1017	<			
			>	OUT =		1017	>			
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**				
					v	^				
			<	IN =		12	<			
			>	OUT =		12	>			
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165				
					v	^				
		0	<	IN =		288	<	0		
		0	>	OUT =		288	>	0		
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90				
					v	^				
		0	<	IN =		130	<	0		
		0	>	OUT =		130	>	0		
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

					10	30				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					10	30				

Valle Vista Road (NS) at: Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**50**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**50**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **8.2%**	BOUND	THRU	**24**	**50**	RATIO **8.2%**
	RIGHT	**0**	**0**	ADT 1,100		RIGHT	**0**	**0**	ADT 1,100
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **8.2%**	BOUND	THRU	**29**	**40**	RATIO **8.2%**
	RIGHT	**0**	**0**	ADT 1,100		RIGHT	**0**	**0**	ADT 1,100
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
PCE FACTORS BY AXLE:					<	^	>			
2: **1.5** 3: **2.0** 4+: **3.0**					0	2	21			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**
PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: **2035**
FACTOR = **1.00**

						94	31			
						v	^			
			272	<			<		162	
			27	>			>		-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2022**
8 YEARS

						30	10			
						v	^			
			80	<			<		50	
			10	>			>		20	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
PCE FACTORS BY AXLE:					<	^	>			
2: 1.5 3: 2 4+: 3.0					3	10	15			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**
PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

						43	110			
						v	^			
			72	<			<		4	
			197	>			>		62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2022
8 YEARS

						10	30			
						v	^			
			20	<			<		20	
			60	>			>		20	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**210**	BOUND	THRU	**30**	IN ...	**140**
	RIGHT	**85**	OUT ...	**90**		RIGHT	**46**	OUT ...	**240**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**410**	BOUND	THRU	**485**	IN ...	**660**
	RIGHT	**8**	OUT ...	**600**		RIGHT	**12**	OUT ...	**530**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**620**	BOUND	THRU	**445**	IN ...	**610**
	RIGHT	**32**	OUT ...	**610**		RIGHT	**59**	OUT ...	**760**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**10**	NORTH LEG	NORTH	LEFT	**18**	**19**	NORTH LEG
BOUND	THRU	**15**	**15**	RATIO **7.0%**	BOUND	THRU	**50**	**55**	RATIO **8.9%**
	RIGHT	**190**	**193**	ADT 4,300		RIGHT	**193**	**197**	ADT 4,300
SOUTH	LEFT	**60**	**65**	SOUTH LEG	SOUTH	LEFT	**58**	**59**	SOUTH LEG
BOUND	THRU	**38**	**39**	RATIO **8.0%**	BOUND	THRU	**30**	**32**	RATIO **8.5%**
	RIGHT	**85**	**106**	ADT 4,700		RIGHT	**46**	**51**	ADT 4,700
EAST	LEFT	**36**	**40**	EAST LEG	EAST	LEFT	**98**	**122**	EAST LEG
BOUND	THRU	**344**	**361**	RATIO **7.9%**	BOUND	THRU	**485**	**519**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 15,800		RIGHT	**12**	**14**	ADT 15,800
WEST	LEFT	**108**	**110**	WEST LEG	WEST	LEFT	**84**	**84**	WEST LEG
BOUND	THRU	**421**	**484**	RATIO **7.4%**	BOUND	THRU	**445**	**460**	RATIO **8.7%**
	RIGHT	**32**	**34**	ADT 13,600		RIGHT	**59**	**63**	ADT 13,600

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6				
				<	v	>				
		4	^				^	5		
		509	>				<	483		
		16	v				v	15		
				<	^	>				
				25	2	29				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11				
					v	^				
		514	<	IN	=	1101	<	503		
		529	>	OUT	=	1101	>	544		
					v	^				
					32	56				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	3		
		82	>				<	89		
		4	v				v	2		
				<	^	>				
				0	0	4				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6				
				<	v	>				
		4	^				^	8		
		591	>				<	572		
		20	v				v	17		
				<	^	>				
				25	2	33				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		997	<	IN	=	1768	<	**997**		
		771	>	OUT	=	1768	>	**771**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		14	<	IN	=	28	<	**14**		
		14	>	OUT	=	28	>	**14**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
		384	<	IN	=	681	<	384		
		298	>	OUT	=	681	>	298		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1408	<	IN	=	2121	<	**1408**		
		713	>	OUT	=	2121	>	**713**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		31	<	IN	=	48	<	**31**		
		17	>	OUT	=	48	>	**17**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
		545	<	IN	=	822	<	545		
		277	>	OUT	=	822	>	277		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
		162	<				<	162		
		-21	>				>	-21		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		160	<	IN	=	220	<	160		
		60	>	OUT	=	220	>	60		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2022**

8 YEARS

					0	0				
					v	^				
		50	<				<	50		
		20	>				>	20		
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5				
				<	v	>				
		10	^				^	4		
		589	>				<	537		
		50	v				v	33		
				<	^	>				
				26	0	15				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14				
					v	^				
		569	<	IN	=	1275	<	574		
		649	>	OUT	=	1275	>	609		
					v	^				
					83	41				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0				
				<	v	>				
		0	^				^	2		
		84	>				<	35		
		2	v				v	5		
				<	^	>				
				2	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5				
				<	v	>				
		10	^				^	6		
		673	>				<	572		
		52	v				v	38		
				<	^	>				
				28	0	18				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
		1333	<	IN	=	2884	<	**1333**		
		1551	>	OUT	=	2884	>	**1551**		
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
		21	<	IN	=	46	<	**21**		
		25	>	OUT	=	46	>	**25**		
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
		378	<	IN	=	819	<	378		
		441	>	OUT	=	819	>	441		
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
		1330	<	IN	=	3088	<	**1330**		
		1758	>	OUT	=	3088	>	**1758**		
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
		41	<	IN	=	82	<	**41**		
		41	>	OUT	=	82	>	**41**		
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
		383	<	IN	=	885	<	383		
		502	>	OUT	=	885	>	502		
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
		4	<				<	4		
		62	>				>	62		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
		60	<	IN	=	130	<	60		
		70	>	OUT	=	130	>	70		
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2022

8 YEARS

					0	0				
					v	^				
		20	<				<	20		
		20	>				>	20		
					v	^				
					0	0				

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**640**	BOUND	THRU	**673**	IN ...	**760**
	RIGHT	**20**	OUT ...	**650**		RIGHT	**52**	OUT ...	**630**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**650**	BOUND	THRU	**572**	IN ...	**640**
	RIGHT	**8**	OUT ...	**650**		RIGHT	**6**	OUT ...	**720**

OPENING YEAR (2022) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**26**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**33**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **5.9%**	BOUND	THRU	**2**	**2**	RATIO **8.5%**
	RIGHT	**6**	**6**	ADT 1,700		RIGHT	**8**	**11**	ADT 1,700
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**612**	RATIO **8.3%**	BOUND	THRU	**673**	**693**	RATIO **8.6%**
	RIGHT	**20**	**20**	ADT 15,700		RIGHT	**52**	**54**	ADT 15,700
WEST	LEFT	**17**	**19**	WEST LEG	WEST	LEFT	**38**	**39**	WEST LEG
BOUND	THRU	**572**	**620**	RATIO **8.1%**	BOUND	THRU	**572**	**590**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 16,000		RIGHT	**6**	**8**	ADT 16,000

Opening Year (2023)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					17	9				
					v	^				
		152	<	IN	=	632	<	304		
		249	>	OUT	=	632	>	274		
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
				<	^	>				
				2	0	20				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					374	**166**				
					v	^				
		177	<	IN	=	1173	<	**197**		
		327	>	OUT	=	1173	>	**311**		
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					3	**3**				
					v	^				
		7	<	IN	=	22	<	**8**		
		7	>	OUT	=	21	>	**7**		
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					143	64				
					v	^				
		70	<	IN	=	453	<	78		
		127	>	OUT	=	453	>	121		
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					613	**273**				
					v	^				
		263	<	IN	=	1517	<	**288**		
		314	>	OUT	=	1517	>	**312**		
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**5**				
					v	^				
		14	<	IN	=	38	<	**15**		
		11	>	OUT	=	38	>	**11**		
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					235	105				
					v	^				
		105	<	IN	=	589	<	114		
		123	>	OUT	=	589	>	122		
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					92	41				
					v	^				
		35	<				<	37		
		-4	>				>	2		
					v	^				
					58	11				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					90	40				
					v	^				
		40	<	IN	=	170	<	40		
		30	>	OUT	=	170	>	30		
					v	^				
					60	10				

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

					30	10				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					20	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	21				
					v	^				
		261	<	IN	=	773	<	467		
		242	>	OUT	=	773	>	262		
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
				<	^	>				
				0	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					346	**524**				
					v	^				
		490	<	IN	=	2005	<	**500**		
		446	>	OUT	=	2004	>	**450**		
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					5	**5**				
					v	^				
		9	<	IN	=	36	<	**9**		
		16	>	OUT	=	36	>	**16**		
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					98	148				
					v	^				
		139	<	IN	=	570	<	142		
		129	>	OUT	=	570	>	130		
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					537	**783**				
					v	^				
		673	<	IN	=	2578	<	**540**		
		509	>	OUT	=	2578	>	**483**		
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**7**				
					v	^				
		23	<	IN	=	64	<	**23**		
		25	>	OUT	=	63	>	**25**		
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					152	221				
					v	^				
		194	<	IN	=	738	<	157		
		149	>	OUT	=	738	>	141		
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					54	73				
					v	^				
		55	<				<	15		
		20	>				>	11		
					v	^				
					28	79				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	70				
					v	^				
		50	<	IN	=	210	<	50		
		30	>	OUT	=	180	>	30		
					v	^				
					30	80				

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

					20	20				
					v	^				
		20	<				<	20		
		10	>				>	10		
					v	^				
					10	30				

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**80**	BOUND	THRU	**5**	IN ...	**90**
	RIGHT	**65**	OUT ...	**260**		RIGHT	**37**	OUT ...	**280**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**50**	BOUND	THRU	**3**	IN ...	**30**
	RIGHT	**0**	OUT ...	**20**		RIGHT	**1**	OUT ...	**40**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**320**	BOUND	THRU	**264**	IN ...	**300**
	RIGHT	**30**	OUT ...	**230**		RIGHT	**21**	OUT ...	**320**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**420**	BOUND	THRU	**279**	IN ...	**550**
	RIGHT	**7**	OUT ...	**360**		RIGHT	**14**	OUT ...	**330**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**17**	NORTH LEG	NORTH	LEFT	**14**	**26**	NORTH LEG
BOUND	THRU	**3**	**4**	RATIO **7.8%**	BOUND	THRU	**5**	**14**	RATIO **7.8%**
	RIGHT	**65**	**65**	ADT 900		RIGHT	**37**	**49**	ADT 900
SOUTH	LEFT	**5**	**15**	SOUTH LEG	SOUTH	LEFT	**7**	**17**	SOUTH LEG
BOUND	THRU	**12**	**35**	RATIO **8.9%**	BOUND	THRU	**3**	**10**	RATIO **9.2%**
	RIGHT	**0**	**0**	ADT 4,000		RIGHT	**1**	**3**	ADT 4,000
EAST	LEFT	**3**	**5**	EAST LEG	EAST	LEFT	**2**	**4**	EAST LEG
BOUND	THRU	**277**	**278**	RATIO **7.7%**	BOUND	THRU	**264**	**264**	RATIO **8.6%**
	RIGHT	**30**	**30**	ADT 10,200		RIGHT	**21**	**29**	ADT 10,200
WEST	LEFT	**202**	**203**	WEST LEG	WEST	LEFT	**240**	**241**	WEST LEG
BOUND	THRU	**202**	**214**	RATIO **7.8%**	BOUND	THRU	**279**	**289**	RATIO **8.8%**
	RIGHT	**7**	**11**	ADT 7,000		RIGHT	**14**	**22**	ADT 7,000

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
		15	^					^		24
		245	>					<		249
		36	v					v		14
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
				297	<	IN	=	686	<	287
				296	>	OUT	=	686	>	292
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
		2	^					^		7
		54	>					<		158
		2	v					v		12
PCE FACTORS BY AXLE:					<	^	>			
2: **1.5** 3: **2.0** 4+: **3.0**					9	0	5			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
		17	^					^		31
		299	>					<		407
		38	v					v		26
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	0			
						v	^			
				197	<	IN	=	510	<	**197**
				311	>	OUT	=	511	>	**314**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	0			
						v	^			
				8	<	IN	=	17	<	**8**
				7	>	OUT	=	18	>	**10**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**
PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
				78	<	IN	=	199	<	78
				121	>	OUT	=	200	>	123
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	0			
						v	^			
				290	<	IN	=	646	<	**290**
				354	>	OUT	=	646	>	**356**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
				15	<	IN	=	27	<	**15**
				11	>	OUT	=	29	>	**14**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
				115	<	IN	=	254	<	115
				138	>	OUT	=	255	>	140
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: **2035**
FACTOR = **1.00**

						0	0			
						v	^			
				38	<			<		38
				18	>			>		17
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						0	10			
						v	^			
				50	<	IN	=	90	<	50
				40	>	OUT	=	100	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2023**
9 YEARS

						0	0			
						v	^			
				20	<			<		20
				10	>			>		10
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
		28	^					^		83
		224	>					<		404
		33	v					v		50
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
				506	<	IN	=	1083	<	537
				285	>	OUT	=	1083	>	323
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
		2	^					^		7
		33	>					<		46
		3	v					v		6
PCE FACTORS BY AXLE:					<	^	>			
2: 1.5 3: 2 4+: 3.0					14	3	6			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
		30	^					^		90
		257	>					<		450
		36	v					v		56
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	0			
						v	^			
				500	<	IN	=	952	<	**500**
				450	>	OUT	=	954	>	**454**
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	0			
						v	^			
				9	<	IN	=	27	<	**9**
				16	>	OUT	=	29	>	**20**
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**
PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
				142	<	IN	=	273	<	142
				130	>	OUT	=	274	>	132
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	0			
						v	^			
				616	<	IN	=	1138	<	**616**
				520	>	OUT	=	1140	>	**524**
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	0			
						v	^			
				23	<	IN	=	51	<	**23**
				26	>	OUT	=	52	>	**29**
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
				178	<	IN	=	331	<	178
				152	>	OUT	=	332	>	154
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

						0	0			
						v	^			
				36	<			<		36
				22	>			>		22
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

						10	10			
						v	^			
				60	<	IN	=	100	<	60
				30	>	OUT	=	110	>	40
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2023
9 YEARS

						0	0			
						v	^			
				20	<			<		20
				10	>			>		10
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**360**	BOUND	THRU	**257**	IN ...	**330**
	RIGHT	**38**	OUT ...	**480**		RIGHT	**36**	OUT ...	**590**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**490**	BOUND	THRU	**450**	IN ...	**620**
	RIGHT	**31**	OUT ...	**370**		RIGHT	**90**	OUT ...	**370**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**41**	NORTH LEG	NORTH	LEFT	**89**	**91**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.1%**	BOUND	THRU	**27**	**27**	RATIO **8.5%**
	RIGHT	**43**	**44**	ADT 2,900		RIGHT	**81**	**82**	ADT 2,900
SOUTH	LEFT	**14**	**14**	SOUTH LEG	SOUTH	LEFT	**26**	**27**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.0%**	BOUND	THRU	**38**	**39**	RATIO **8.3%**
	RIGHT	**17**	**18**	ADT 4,000		RIGHT	**29**	**30**	ADT 4,000
EAST	LEFT	**17**	**18**	EAST LEG	EAST	LEFT	**30**	**31**	EAST LEG
BOUND	THRU	**299**	**309**	RATIO **7.4%**	BOUND	THRU	**257**	**263**	RATIO **8.6%**
	RIGHT	**38**	**39**	ADT 11,500		RIGHT	**36**	**36**	ADT 11,500
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**57**	WEST LEG
BOUND	THRU	**407**	**428**	RATIO **8.0%**	BOUND	THRU	**450**	**471**	RATIO **8.6%**
	RIGHT	**31**	**32**	ADT 10,700		RIGHT	**90**	**92**	ADT 10,700

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	86	94			
					<	v	>			
			39	^				^		29
			214	>				<		300
			32	v				v		122
					<	^	>			
					52	92	101			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						257	160			
						v	^			
			429	<	IN	=	1238	<		451
			285	>	OUT	=	1238	>		409
						v	^			
						240	245			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					13	5	20			
					<	v	>			
			9	^				^		3
			56	>				<		68
			8	v				v		5
					<	^	>			
					15	20	18			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					90	91	114			
					<	v	>			
			48	^				^		32
			270	>				<		368
			40	v				v		127
					<	^	>			
					67	112	119			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						720	**305**			
						v	^			
			197	<	IN	=	2198	<		**793**
			314	>	OUT	=	2197	>		**502**
						v	^			
						1193	**371**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						7	**10**			
						v	^			
			8	<	IN	=	41	<		**13**
			10	>	OUT	=	40	>		**12**
						v	^			
						10	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						276	119			
						v	^			
			78	<	IN	=	849	<		306
			123	>	OUT	=	848	>		195
						v	^			
						457	145			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						674	**289**			
						v	^			
			290	<	IN	=	2869	<		**1412**
			356	>	OUT	=	2867	>		**586**
						v	^			
						1702	**427**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						11	**8**			
						v	^			
			15	<	IN	=	71	<		**35**
			14	>	OUT	=	69	>		**17**
						v	^			
						29	**11**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						260	112			
						v	^			
			115	<	IN	=	1114	<		548
			140	>	OUT	=	1112	>		228
						v	^			
						656	166			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						-16	-7			
						v	^			
			38	<				<		243
			17	>				>		34
						v	^			
						200	21			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
			50	<	IN	=	330	<		240
			40	>	OUT	=	320	>		50
						v	^			
						200	20			

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

						10	10			
						v	^			
			20	<				<		80
			10	>				>		20
						v	^			
						70	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					95	87	111			
					<	v	>			
			83	^				^		45
			270	>				<		363
			36	v				v		99
					<	^	>			
					106	145	171			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						293	273			
						v	^			
			564	<	IN	=	1611	<		507
			389	>	OUT	=	1611	>		552
						v	^			
						222	422			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					12	4	7			
					<	v	>			
			2	^				^		10
			40	>				<		50
			0	v				v		9
					<	^	>			
					5	14	17			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					107	91	118			
					<	v	>			
			85	^				^		55
			310	>				<		413
			36	v				v		108
					<	^	>			
					111	159	188			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						588	**830**			
						v	^			
			500	<	IN	=	3381	<		**945**
			454	>	OUT	=	3378	>		**1212**
						v	^			
						836	**1394**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						12	**10**			
						v	^			
			9	<	IN	=	61	<		**18**
			20	>	OUT	=	58	>		**21**
						v	^			
						18	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						168	235			
						v	^			
			142	<	IN	=	962	<		269
			132	>	OUT	=	960	>		345
						v	^			
						239	393			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						541	**809**			
						v	^			
			616	<	IN	=	4205	<		**1204**
			524	>	OUT	=	4204	>		**1782**
						v	^			
						997	**1936**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						12	**16**			
						v	^			
			23	<	IN	=	113	<		**42**
			29	>	OUT	=	110	>		**43**
						v	^			
						28	**30**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						154	231			
						v	^			
			178	<	IN	=	1206	<		348
			154	>	OUT	=	1205	>		510
						v	^			
						286	550			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						-13	-4			
						v	^			
			36	<				<		79
			22	>				>		165
						v	^			
						48	157			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	30			
						v	^			
			60	<	IN	=	310	<		80
			40	>	OUT	=	310	>		170
						v	^			
						50	160			

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

						10	10			
						v	^			
			20	<				<		30
			10	>				>		60
						v	^			
						20	50			

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**310**	BOUND	THRU	**159**	IN ...	**510**
	RIGHT	**119**	OUT ...	**330**		RIGHT	**188**	OUT ...	**260**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**310**	BOUND	THRU	**91**	IN ...	**330**
	RIGHT	**90**	OUT ...	**200**		RIGHT	**107**	OUT ...	**310**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**370**	BOUND	THRU	**310**	IN ...	**440**
	RIGHT	**40**	OUT ...	**550**		RIGHT	**36**	OUT ...	**650**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**610**	BOUND	THRU	**413**	IN ...	**610**
	RIGHT	**32**	OUT ...	**520**		RIGHT	**55**	OUT ...	**680**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**68**	NORTH LEG	NORTH	LEFT	**111**	**117**	NORTH LEG
BOUND	THRU	**112**	**116**	RATIO **7.2%**	BOUND	THRU	**159**	**171**	RATIO **9.1%**
	RIGHT	**119**	**128**	ADT 7,200		RIGHT	**188**	**225**	ADT 7,200
SOUTH	LEFT	**114**	**117**	SOUTH LEG	SOUTH	LEFT	**118**	**130**	SOUTH LEG
BOUND	THRU	**91**	**108**	RATIO **7.8%**	BOUND	THRU	**91**	**98**	RATIO **9.4%**
	RIGHT	**90**	**92**	ADT 8,200		RIGHT	**107**	**110**	ADT 8,200
EAST	LEFT	**48**	**50**	EAST LEG	EAST	LEFT	**85**	**87**	EAST LEG
BOUND	THRU	**270**	**275**	RATIO **8.1%**	BOUND	THRU	**310**	**325**	RATIO **9.2%**
	RIGHT	**40**	**47**	ADT 14,000		RIGHT	**36**	**37**	ADT 14,000
WEST	LEFT	**127**	**174**	WEST LEG	WEST	LEFT	**108**	**125**	WEST LEG
BOUND	THRU	**368**	**399**	RATIO **7.5%**	BOUND	THRU	**413**	**430**	RATIO **8.9%**
	RIGHT	**32**	**37**	ADT 12,400		RIGHT	**55**	**56**	ADT 12,400

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				58	168	13		
				<	v	>		
		21	^				^	21
		39	>				<	87
		22	v				v	71
				<	^	>		
				58	268	125		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					239	310		
					v	^		
		203	<	IN	=	951	<	179
		82	>	OUT	=	951	>	177
					v	^		
					261	451		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				6	11	4		
				<	v	>		
		11	^				^	3
		7	>				<	5
		5	v				v	9
				<	^	>		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

					7	25	24	

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				64	179	17		
				<	v	>		
		32	^				^	24
		46	>				<	92
		27	v				v	80
				<	^	>		
				65	293	149		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					1193	**371**		
					v	^		
		694	<	IN	=	1564	<	**0**
		76	>	OUT	=	1564	>	**0**
					v	^		
					499	**295**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					10	**11**		
					v	^		
		0	<	IN	=	20	<	**0**
		0	>	OUT	=	21	>	**0**
					v	^		
					10	**10**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					457	145		
					v	^		
		264	<	IN	=	601	<	0
		29	>	OUT	=	601	>	0
					v	^		
					193	115		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					1702	**427**		
					v	^		
		754	<	IN	=	2129	<	**0**
		97	>	OUT	=	2129	>	**0**
					v	^		
					948	**330**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					29	**11**		
					v	^		
		1	<	IN	=	40	<	**0**
		1	>	OUT	=	40	>	**0**
					v	^		
					28	**10**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					656	166		
					v	^		
		287	<	IN	=	822	<	0
		37	>	OUT	=	822	>	0
					v	^		
					370	129		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					200	21		
					v	^		
		23	<			<		0
		8	>			>		0
					v	^		
					177	13		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					200	30		
					v	^		
		20	<	IN	=	240	<	20
		10	>	OUT	=	250	>	20
					v	^		
					180	10		

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

					70	10		
					v	^		
		10	<			<		10
		0	>			>		10
					v	^		
					60	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				90	92	14		
				<	v	>		
		28	^				^	30
		35	>				<	50
		19	v				v	51
				<	^	>		
				54	359	193		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					196	417		
					v	^		
		194	<	IN	=	1015	<	131
		82	>	OUT	=	1015	>	242
					v	^		
					162	606		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				5	5	2		
				<	v	>		
		0	^				^	3
		2	>				<	2
		0	v				v	0
				<	^	>		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

					2	46	30	

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				95	97	16		
				<	v	>		
		28	^				^	33
		37	>				<	52
		19	v				v	51
				<	^	>		
				56	405	223		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					836	**1394**		
					v	^		
		178	<	IN	=	2229	<	**0**
		677	>	OUT	=	2230	>	**0**
					v	^		
					658	**716**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					18	**11**		
					v	^		
		1	<	IN	=	30	<	**0**
		1	>	OUT	=	29	>	**0**
					v	^		
					17	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					239	393		
					v	^		
		50	<	IN	=	632	<	0
		190	>	OUT	=	632	>	0
					v	^		
					188	203		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					997	**1936**		
					v	^		
		212	<	IN	=	2933	<	**0**
		745	>	OUT	=	2933	>	**0**
					v	^		
					785	**1191**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					28	**30**		
					v	^		
		1	<	IN	=	58	<	**0**
		1	>	OUT	=	58	>	**0**
					v	^		
					27	**29**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					286	550		
					v	^		
		60	<	IN	=	836	<	0
		209	>	OUT	=	836	>	0
					v	^		
					227	341		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					48	157		
					v	^		
		10	<			<		0
		19	>			>		0
					v	^		
					38	138		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	160		
					v	^		
		20	<	IN	=	220	<	10
		20	>	OUT	=	250	>	30
					v	^		
					40	140		

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

					20	50		
					v	^		
		10	<			<		0
		10	>			>		10
					v	^		
					10	50		

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**740**
	RIGHT	**149**	OUT ...	**350**		RIGHT	**223**	OUT ...	**180**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**330**	BOUND	THRU	**97**	IN ...	**230**
	RIGHT	**64**	OUT ...	**360**		RIGHT	**95**	OUT ...	**520**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**90**
	RIGHT	**27**	OUT ...	**230**		RIGHT	**19**	OUT ...	**210**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**210**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**220**		RIGHT	**33**	OUT ...	**290**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**67**	NORTH LEG	NORTH	LEFT	**56**	**58**	NORTH LEG
BOUND	THRU	**293**	**299**	RATIO **8.1%**	BOUND	THRU	**405**	**452**	RATIO **8.8%**
	RIGHT	**149**	**150**	ADT 8,500		RIGHT	**223**	**233**	ADT 8,500
SOUTH	LEFT	**17**	**22**	SOUTH LEG	SOUTH	LEFT	**16**	**18**	SOUTH LEG
BOUND	THRU	**179**	**232**	RATIO **8.3%**	BOUND	THRU	**97**	**108**	RATIO **8.9%**
	RIGHT	**64**	**76**	ADT 10,400		RIGHT	**95**	**103**	ADT 10,400
EAST	LEFT	**32**	**34**	EAST LEG	EAST	LEFT	**28**	**31**	EAST LEG
BOUND	THRU	**46**	**48**	RATIO **8.8%**	BOUND	THRU	**37**	**39**	RATIO **8.8%**
	RIGHT	**27**	**28**	ADT 4,900		RIGHT	**19**	**20**	ADT 4,900
WEST	LEFT	**80**	**89**	WEST LEG	WEST	LEFT	**51**	**52**	WEST LEG
BOUND	THRU	**92**	**94**	RATIO **9.9%**	BOUND	THRU	**52**	**54**	RATIO **8.7%**
	RIGHT	**24**	**27**	ADT 3,500		RIGHT	**33**	**37**	ADT 3,500

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		402	>				<	575
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1		
					v	^		
		578	<	IN =	1001	<		586
		404	>	OUT =	1001	>		410
					v	^		
					12	9		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		64	>				<	52
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		466	>				<	627
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		793	<	IN =	1295	<		**793**
		502	>	OUT =	1295	>		**502**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		13	<	IN =	25	<		**13**
		12	>	OUT =	25	>		**12**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		306	<	IN =	500	<		306
		195	>	OUT =	500	>		195
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1412	<	IN =	1998	<		**1412**
		586	>	OUT =	1998	>		**586**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		35	<	IN =	52	<		**35**
		17	>	OUT =	52	>		**17**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		548	<	IN =	777	<		548
		228	>	OUT =	777	>		228
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					v	^		
		243	<			<		243
		34	>			>		34
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		240	<	IN =	290	<		240
		50	>	OUT =	290	>		50
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO **2023**

7 YEARS

					0	0		
					v	^		
		60	<			<		60
		10	>			>		10
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		637	>				<	524
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5		
					v	^		
		536	<	IN =	1206	<		540
		642	>	OUT =	1206	>		649
					v	^		
					16	17		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		61	>				<	24
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		698	>				<	548
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		945	<	IN =	2157	<		**945**
		1212	>	OUT =	2157	>		**1212**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		18	<	IN =	39	<		**18**
		21	>	OUT =	39	>		**21**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		269	<	IN =	614	<		269
		345	>	OUT =	614	>		345
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1204	<	IN =	2986	<		**1204**
		1782	>	OUT =	2986	>		**1782**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		42	<	IN =	85	<		**42**
		43	>	OUT =	85	>		**43**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		348	<	IN =	857	<		348
		510	>	OUT =	857	>		510
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0		
					v	^		
		79	<			<		79
		165	>			>		165
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		80	<	IN =	250	<		80
		170	>	OUT =	250	>		170
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO 2023

7 YEARS

					0	0		
					v	^		
		20	<			<		20
		40	>			>		40
					v	^		
					0	0		

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**480**	BOUND	THRU	**698**	IN ...	**750**
	RIGHT	**2**	OUT ...	**700**		RIGHT	**2**	OUT ...	**580**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**700**	BOUND	THRU	**548**	IN ...	**580**
	RIGHT	**1**	OUT ...	**480**		RIGHT	**2**	OUT ...	**750**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**474**	RATIO **8.5%**	BOUND	THRU	**698**	**735**	RATIO **9.5%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**696**	RATIO **8.4%**	BOUND	THRU	**548**	**564**	RATIO **9.4%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

				0	0			
				v	^			
			80 <		<	80		
			10 >		>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

				0	0			
				v	^			
			30 <		<	30		
			60 >		>	60		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**680**
	RIGHT	**0**	OUT ...	**620**		RIGHT	**0**	OUT ...	**600**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**620**	BOUND	THRU	**568**	IN ...	**600**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**680**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**680**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**620**	RATIO **7.2%**	BOUND	THRU	**568**	**600**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			419 <	IN =	778 <	419		
			359 >	OUT =	778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			793 <	IN =	1295 <	**793**		
			502 >	OUT =	1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			13 <	IN =	25 <	**13**		
			12 >	OUT =	25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
			306 <	IN =	500 <	306		
			195 >	OUT =	500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1412 <	IN =	1998 <	**1412**		
			586 >	OUT =	1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			35 <	IN =	52 <	**35**		
			17 >	OUT =	52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			548 <	IN =	777 <	548		
			228 >	OUT =	777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
			243 <		<	243		
			34 >		>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			240 <	IN =	280 <	240		
			40 >	OUT =	280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

				0	0			
				v	^			
			80 <		<	80		
			10 >		>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			510 <	IN =	1077 <	510		
			567 >	OUT =	1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
			945 <	IN =	2157 <	**945**		
			1212 >	OUT =	2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
			18 <	IN =	39 <	**18**		
			21 >	OUT =	39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
			269 <	IN =	614 <	269		
			345 >	OUT =	614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
			1204 <	IN =	2986 <	**1204**		
			1782 >	OUT =	2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
			42 <	IN =	85 <	**42**		
			43 >	OUT =	85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			348 <	IN =	857 <	348		
			510 >	OUT =	857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
			79 <		<	79		
			165 >		>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
			80 <	IN =	250 <	80		
			170 >	OUT =	250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

				0	0			
				v	^			
			30 <		<	30		
			60 >		>	60		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**680**
	RIGHT	**0**	OUT ...	**620**		RIGHT	**0**	OUT ...	**600**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**620**	BOUND	THRU	**568**	IN ...	**600**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**680**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.2%**	BOUND	THRU	**621**	**680**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**620**	RATIO **7.2%**	BOUND	THRU	**568**	**600**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					14	2	9			
					<	v	>			
			19	^				^	11	
			324	>				<	400	
			16	v				v	11	
					<	^	>			
					5	1	18			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						25	31			
						v	^			
			419	<	IN	=	830	<	422	
			359	>	OUT	=	830	>	351	
						v	^			
						29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	0	2			
					<	v	>			
			0	^				^	3	
			63	>				<	116	
			2	v				v	0	
					<	^	>			
					2	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					22	2	11			
					<	v	>			
			19	^				^	14	
			387	>				<	516	
			18	v				v	11	
					<	^	>			
					7	1	18			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						53	**81**			
						v	^			
			793	<	IN	=	1721	<	**983**	
			502	>	OUT	=	1720	>	**669**	
						v	^			
						177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
			13	<	IN	=	28	<	**14**	
			12	>	OUT	=	28	>	**13**	
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						20	31			
						v	^			
			306	<	IN	=	663	<	378	
			195	>	OUT	=	663	>	259	
						v	^			
						68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						141	**129**			
						v	^			
			1412	<	IN	=	2632	<	**1678**	
			586	>	OUT	=	2632	>	**735**	
						v	^			
						356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						1	**1**			
						v	^			
			35	<	IN	=	60	<	**38**	
			17	>	OUT	=	60	>	**20**	
						v	^			
						4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						54	49			
						v	^			
			548	<	IN	=	1020	<	650	
			228	>	OUT	=	1020	>	286	
						v	^			
						137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						34	19			
						v	^			
			243	<				<	272	
			34	>				>	27	
						v	^			
						69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
			240	<	IN	=	360	<	270	
			40	>	OUT	=	370	>	40	
						v	^			
						70	20			

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

						10	10			
						v	^			
			80	<				<	90	
			10	>				>	10	
						v	^			
						20	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					16	0	10			
					<	v	>			
			26	^				^	15	
			529	>				<	488	
			12	v				v	18	
					<	^	>			
					6	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						26	41			
						v	^			
			510	<	IN	=	1129	<	521	
			567	>	OUT	=	1129	>	548	
						v	^			
						30	15			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	0	7			
					<	v	>			
			8	^				^	3	
			46	>				<	52	
			0	v				v	0	
					<	^	>			
					5	0	2			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					18	0	17			
					<	v	>			
			34	^				^	18	
			575	>				<	540	
			12	v				v	18	
					<	^	>			
					11	0	11			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						125	**83**			
						v	^			
			945	<	IN	=	2793	<	**1206**	
			1212	>	OUT	=	2793	>	**1471**	
						v	^			
						294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
			18	<	IN	=	43	<	**20**	
			21	>	OUT	=	44	>	**24**	
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						35	23			
						v	^			
			269	<	IN	=	793	<	343	
			345	>	OUT	=	793	>	418	
						v	^			
						83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						232	**246**			
						v	^			
			1204	<	IN	=	4038	<	**1441**	
			1782	>	OUT	=	4038	>	**2154**	
						v	^			
						434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**2**			
						v	^			
			42	<	IN	=	97	<	**46**	
			43	>	OUT	=	98	>	**48**	
						v	^			
						6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						65	69			
						v	^			
			348	<	IN	=	1155	<	415	
			510	>	OUT	=	1155	>	615	
						v	^			
						123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						30	46			
						v	^			
			79	<				<	72	
			165	>				>	197	
						v	^			
						40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	50			
						v	^			
			80	<	IN	=	360	<	70	
			170	>	OUT	=	370	>	200	
						v	^			
						40	90			

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

						10	20			
						v	^			
			30	<				<	20	
			60	>				>	70	
						v	^			
						10	30			

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**40**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**18**	OUT ...	**50**		RIGHT	**11**	OUT ...	**40**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**22**	OUT ...	**40**		RIGHT	**18**	OUT ...	**70**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**430**	BOUND	THRU	**575**	IN ...	**680**
	RIGHT	**18**	OUT ...	**630**		RIGHT	**12**	OUT ...	**600**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**630**	BOUND	THRU	**540**	IN ...	**600**
	RIGHT	**14**	OUT ...	**430**		RIGHT	**18**	OUT ...	**670**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**10**	NORTH LEG	NORTH	LEFT	**11**	**24**	NORTH LEG
BOUND	THRU	**1**	**2**	RATIO **8.2%**	BOUND	THRU	**0**	**0**	RATIO **10.9%**
	RIGHT	**18**	**28**	ADT 1,100		RIGHT	**11**	**26**	ADT 1,100
SOUTH	LEFT	**11**	**16**	SOUTH LEG	SOUTH	LEFT	**17**	**25**	SOUTH LEG
BOUND	THRU	**2**	**4**	RATIO **11.3%**	BOUND	THRU	**0**	**0**	RATIO **11.3%**
	RIGHT	**22**	**30**	ADT 800		RIGHT	**18**	**25**	ADT 800
EAST	LEFT	**19**	**20**	EAST LEG	EAST	LEFT	**34**	**46**	EAST LEG
BOUND	THRU	**387**	**395**	RATIO **7.7%**	BOUND	THRU	**575**	**619**	RATIO **9.1%**
	RIGHT	**18**	**26**	ADT 13,900		RIGHT	**12**	**16**	ADT 13,900
WEST	LEFT	**11**	**20**	WEST LEG	WEST	LEFT	**18**	**24**	WEST LEG
BOUND	THRU	**516**	**590**	RATIO **7.7%**	BOUND	THRU	**540**	**551**	RATIO **9.2%**
	RIGHT	**14**	**18**	ADT 14,000		RIGHT	**18**	**24**	ADT 14,000

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
0	^							^	0	
0	>							<	0	
0	v							v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24				
					v	^				
			0	<	IN =	53	<	0		
			0	>	OUT =	53	>	0		
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0				
				<	v	>				
0	^							^	0	
0	>							<	0	
0	v							v	0	
				<	^	>				
				0	2	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0				
				<	v	>				
0	^							^	0	
0	>							<	0	
0	v							v	0	
				<	^	>				
				0	26	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**				
					v	^				
			<		IN =	360	<			
			>		OUT =	360	>			
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<		IN =	4	<			
			>		OUT =	4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70				
					v	^				
			0	<	IN =	138	<	0		
			0	>	OUT =	138	>	0		
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**				
					v	^				
			<		IN =	583	<			
			>		OUT =	583	>			
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**				
					v	^				
			<		IN =	8	<			
			>		OUT =	8	>			
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88				
					v	^				
			0	<	IN =	224	<	0		
			0	>	OUT =	224	>	0		
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17				
					v	^				
			0	<			<	0		
			0	>			>	0		
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20				
					v	^				
			0	<	IN =	90	<	0		
			0	>	OUT =	90	>	0		
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

					20	10				
					v	^				
			0	<			<	0		
			0	>			>	0		
					v	^				
					20	10				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
0	^							^	0	
0	>							<	0	
0	v							v	0	
				<	^	>				
				0	19	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19				
					v	^				
			0	<	IN =	48	<	0		
			0	>	OUT =	48	>	0		
					v	^				
					29	19				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
0	^							^	0	
0	>							<	0	
0	v							v	0	
				<	^	>				
				0	5	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0				
				<	v	>				
0	^							^	0	
0	>							<	0	
0	v							v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**				
					v	^				
			<		IN =	544	<			
			>		OUT =	544	>			
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<		IN =	4	<			
			>		OUT =	4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71				
					v	^				
			0	<	IN =	153	<	0		
			0	>	OUT =	153	>	0		
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**				
					v	^				
			<		IN =	1017	<			
			>		OUT =	1017	>			
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**				
					v	^				
			<		IN =	12	<			
			>		OUT =	12	>			
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165				
					v	^				
			0	<	IN =	288	<	0		
			0	>	OUT =	288	>	0		
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94				
					v	^				
			0	<			<	0		
			0	>			>	0		
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90				
					v	^				
			0	<	IN =	130	<	0		
			0	>	OUT =	130	>	0		
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

					10	30				
					v	^				
			0	<			<	0		
			0	>			>	0		
					v	^				
					10	30				

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**50**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**50**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **7.5%**	BOUND	THRU	**24**	**50**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **7.5%**	BOUND	THRU	**29**	**40**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24				
					v	^				
		0	<	IN =		53	<	0		
		0	>	OUT =		53	>	0		
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	2	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	26	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**				
					v	^				
			<	IN =		360	<			
			>	OUT =		360	>			
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70				
					v	^				
		0	<	IN =		138	<	0		
		0	>	OUT =		138	>	0		
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**				
					v	^				
			<	IN =		583	<			
			>	OUT =		583	>			
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**				
					v	^				
			<	IN =		8	<			
			>	OUT =		8	>			
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88				
					v	^				
		0	<	IN =		224	<	0		
		0	>	OUT =		224	>	0		
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20				
					v	^				
		0	<	IN =		90	<	0		
		0	>	OUT =		90	>	0		
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

					20	10				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					20	10				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	19	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19				
					v	^				
		0	<	IN =		48	<	0		
		0	>	OUT =		48	>	0		
					v	^				
					29	19				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	5	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**				
					v	^				
			<	IN =		544	<			
			>	OUT =		544	>			
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71				
					v	^				
		0	<	IN =		153	<	0		
		0	>	OUT =		153	>	0		
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**				
					v	^				
			<	IN =		1017	<			
			>	OUT =		1017	>			
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**				
					v	^				
			<	IN =		12	<			
			>	OUT =		12	>			
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165				
					v	^				
		0	<	IN =		288	<	0		
		0	>	OUT =		288	>	0		
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90				
					v	^				
		0	<	IN =		130	<	0		
		0	>	OUT =		130	>	0		
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

					10	30				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					10	30				

Valle Vista Road (NS) at: Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**50**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**50**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**50**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **7.5%**	BOUND	THRU	**24**	**50**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**50**	RATIO **7.5%**	BOUND	THRU	**29**	**40**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
					<	^	>			
					0	2	21			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						94	31			
						v	^			
			272	<			<		162	
			27	>			>		-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

						30	10			
						v	^			
			90	<			<		50	
			10	>			>		20	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
					<	^	>			
					3	10	15			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						43	110			
						v	^			
			72	<			<		4	
			197	>			>		62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

						10	40			
						v	^			
			20	<			<		20	
			70	>			>		20	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**210**	BOUND	THRU	**30**	IN ...	**140**
	RIGHT	**85**	OUT ...	**90**		RIGHT	**46**	OUT ...	**250**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**410**	BOUND	THRU	**485**	IN ...	**670**
	RIGHT	**8**	OUT ...	**610**		RIGHT	**12**	OUT ...	**530**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**620**	BOUND	THRU	**445**	IN ...	**610**
	RIGHT	**32**	OUT ...	**610**		RIGHT	**59**	OUT ...	**760**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**11**	NORTH LEG	NORTH	LEFT	**18**	**19**	NORTH LEG
BOUND	THRU	**15**	**16**	RATIO **7.4%**	BOUND	THRU	**50**	**57**	RATIO **9.6%**
	RIGHT	**190**	**193**	ADT 4,100		RIGHT	**193**	**196**	ADT 4,100
SOUTH	LEFT	**60**	**64**	SOUTH LEG	SOUTH	LEFT	**58**	**59**	SOUTH LEG
BOUND	THRU	**38**	**39**	RATIO **8.2%**	BOUND	THRU	**30**	**32**	RATIO **8.8%**
	RIGHT	**85**	**109**	ADT 4,600		RIGHT	**46**	**51**	ADT 4,600
EAST	LEFT	**36**	**41**	EAST LEG	EAST	LEFT	**98**	**128**	EAST LEG
BOUND	THRU	**344**	**362**	RATIO **8.1%**	BOUND	THRU	**485**	**522**	RATIO **9.0%**
	RIGHT	**8**	**8**	ADT 15,400		RIGHT	**12**	**14**	ADT 15,400
WEST	LEFT	**108**	**110**	WEST LEG	WEST	LEFT	**84**	**86**	WEST LEG
BOUND	THRU	**421**	**491**	RATIO **7.9%**	BOUND	THRU	**445**	**460**	RATIO **9.2%**
	RIGHT	**32**	**33**	ADT 13,000		RIGHT	**59**	**65**	ADT 13,000

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6				
				<	v	>				
		4	^				^	5		
		509	>				<	483		
		16	v				v	15		
				<	^	>				
				25	2	29				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11				
					v	^				
			514	<	IN	=	1101	<	503	
			529	>	OUT	=	1101	>	544	
					v	^				
					32	56				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	3		
		82	>				<	89		
		4	v				v	2		
				<	^	>				
				0	0	4				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6				
				<	v	>				
		4	^				^	8		
		591	>				<	572		
		20	v				v	17		
				<	^	>				
				25	2	33				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
			997	<	IN	=	1768	<	**997**	
			771	>	OUT	=	1768	>	**771**	
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
			14	<	IN	=	28	<	**14**	
			14	>	OUT	=	28	>	**14**	
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0				
					v	^				
			384	<	IN	=	681	<	384	
			298	>	OUT	=	681	>	298	
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
			1408	<	IN	=	2121	<	**1408**	
			713	>	OUT	=	2121	>	**713**	
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
			31	<	IN	=	48	<	**31**	
			17	>	OUT	=	48	>	**17**	
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0				
					v	^				
			545	<	IN	=	822	<	545	
			277	>	OUT	=	822	>	277	
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0				
					v	^				
			162	<			<	162		
			-21	>			>	-21		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
			160	<	IN	=	220	<	160	
			60	>	OUT	=	220	>	60	
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO **2023**

9 YEARS

					0	0				
					v	^				
			50	<			<	50		
			20	>			>	20		
					v	^				
					0	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5				
				<	v	>				
		10	^				^	4		
		589	>				<	537		
		50	v				v	33		
				<	^	>				
				26	0	15				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14				
					v	^				
			569	<	IN	=	1275	<	574	
			649	>	OUT	=	1275	>	609	
					v	^				
					83	41				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0				
				<	v	>				
		0	^				^	2		
		84	>				<	35		
		2	v				v	5		
				<	^	>				
				2	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5				
				<	v	>				
		10	^				^	6		
		673	>				<	572		
		52	v				v	38		
				<	^	>				
				28	0	18				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**				
					v	^				
			1333	<	IN	=	2884	<	**1333**	
			1551	>	OUT	=	2884	>	**1551**	
					v	^				
					0	**0**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**				
					v	^				
			21	<	IN	=	46	<	**21**	
			25	>	OUT	=	46	>	**25**	
					v	^				
					0	**0**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0				
					v	^				
			378	<	IN	=	819	<	378	
			441	>	OUT	=	819	>	441	
					v	^				
					0	0				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**				
					v	^				
			1330	<	IN	=	3088	<	**1330**	
			1758	>	OUT	=	3088	>	**1758**	
					v	^				
					0	**0**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**				
					v	^				
			41	<	IN	=	82	<	**41**	
			41	>	OUT	=	82	>	**41**	
					v	^				
					0	**0**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0				
					v	^				
			383	<	IN	=	885	<	383	
			502	>	OUT	=	885	>	502	
					v	^				
					0	0				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0				
					v	^				
			4	<			<	4		
			62	>			>	62		
					v	^				
					0	0				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0				
					v	^				
			60	<	IN	=	130	<	60	
			70	>	OUT	=	130	>	70	
					v	^				
					0	0				

FUTURE YEAR GROWTH: 2014 TO 2023

9 YEARS

					0	0				
					v	^				
			20	<			<	20		
			20	>			>	20		
					v	^				
					0	0				

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**640**	BOUND	THRU	**673**	IN ...	**760**
	RIGHT	**20**	OUT ...	**650**		RIGHT	**52**	OUT ...	**630**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**650**	BOUND	THRU	**572**	IN ...	**640**
	RIGHT	**8**	OUT ...	**650**		RIGHT	**6**	OUT ...	**720**

OPENING YEAR (2023) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**26**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**34**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **6.0%**	BOUND	THRU	**2**	**2**	RATIO **8.5%**
	RIGHT	**6**	**6**	ADT 1,700		RIGHT	**8**	**11**	ADT 1,700
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**612**	RATIO **8.2%**	BOUND	THRU	**673**	**693**	RATIO **8.6%**
	RIGHT	**20**	**20**	ADT 15,800		RIGHT	**52**	**54**	ADT 15,800
WEST	LEFT	**17**	**19**	WEST LEG	WEST	LEFT	**38**	**39**	WEST LEG
BOUND	THRU	**572**	**620**	RATIO **8.0%**	BOUND	THRU	**572**	**590**	RATIO **8.6%**
	RIGHT	**8**	**8**	ADT 16,100		RIGHT	**6**	**8**	ADT 16,100

Opening Year (2024)

Beekly Road (NS) at: Phelan Road (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	12	5				
				<	v	>				
		1	^				^	5		
		224	>				<	138		
		24	v				v	161		
				<	^	>				
				14	3	45				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					17	9				
					v	^				
		152	<	IN	=	632	<	304		
		249	>	OUT	=	632	>	274		
					v	^				
					197	62				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		2	^				^	2		
		53	>				<	64		
		6	v				v	41		
				<	^	>				
				2	0	20				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	12	5				
				<	v	>				
		3	^				^	7		
		277	>				<	202		
		30	v				v	202		
				<	^	>				
				16	3	65				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					374	**166**				
					v	^				
		177	<	IN	=	1173	<	**197**		
		327	>	OUT	=	1173	>	**311**		
					v	^				
					519	**275**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					3	**3**				
					v	^				
		7	<	IN	=	22	<	**8**		
		7	>	OUT	=	21	>	**7**		
					v	^				
					4	**4**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					143	64				
					v	^				
		70	<	IN	=	453	<	78		
		127	>	OUT	=	453	>	121		
					v	^				
					199	106				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					613	**273**				
					v	^				
		263	<	IN	=	1517	<	**288**		
		314	>	OUT	=	1517	>	**312**		
					v	^				
					669	**302**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**5**				
					v	^				
		14	<	IN	=	38	<	**15**		
		11	>	OUT	=	38	>	**11**		
					v	^				
					8	**5**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					235	105				
					v	^				
		105	<	IN	=	589	<	114		
		123	>	OUT	=	589	>	122		
					v	^				
					257	116				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					92	41				
					v	^				
		35	<				<	37		
		-4	>				>	2		
					v	^				
					58	11				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					90	40				
					v	^				
		40	<	IN	=	170	<	40		
		30	>	OUT	=	170	>	30		
					v	^				
					60	10				

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

					30	10				
					v	^				
		10	<				<	10		
		10	>				>	10		
					v	^				
					20	0				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		221	>				<	246		
		19	v				v	207		
				<	^	>				
				14	5	34				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	21				
					v	^				
		261	<	IN	=	773	<	467		
		242	>	OUT	=	773	>	262		
					v	^				
					229	53				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^				^	0		
		43	>				<	33		
		2	v				v	33		
				<	^	>				
				0	0	3				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				1	3	7				
				<	v	>				
		2	^				^	14		
		264	>				<	279		
		21	v				v	240		
				<	^	>				
				14	5	37				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					346	**524**				
					v	^				
		490	<	IN	=	2005	<	**500**		
		446	>	OUT	=	2004	>	**450**		
					v	^				
					540	**713**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					5	**5**				
					v	^				
		9	<	IN	=	36	<	**9**		
		16	>	OUT	=	36	>	**16**		
					v	^				
					6	**6**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					98	148				
					v	^				
		139	<	IN	=	570	<	142		
		129	>	OUT	=	570	>	130		
					v	^				
					153	201				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					537	**783**				
					v	^				
		673	<	IN	=	2578	<	**540**		
		509	>	OUT	=	2578	>	**483**		
					v	^				
					639	**992**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					7	**7**				
					v	^				
		23	<	IN	=	64	<	**23**		
		25	>	OUT	=	63	>	**25**		
					v	^				
					8	**9**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					152	221				
					v	^				
		194	<	IN	=	738	<	157		
		149	>	OUT	=	738	>	141		
					v	^				
					181	280				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					54	73				
					v	^				
		55	<				<	15		
		20	>				>	11		
					v	^				
					28	79				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	70				
					v	^				
		50	<	IN	=	210	<	50		
		30	>	OUT	=	180	>	30		
					v	^				
					30	80				

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

					20	30				
					v	^				
		20	<				<	20		
		10	>				>	10		
					v	^				
					10	30				

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**80**	BOUND	THRU	**5**	IN ...	**90**
	RIGHT	**65**	OUT ...	**260**		RIGHT	**37**	OUT ...	**280**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**50**	BOUND	THRU	**3**	IN ...	**30**
	RIGHT	**0**	OUT ...	**20**		RIGHT	**1**	OUT ...	**50**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**320**	BOUND	THRU	**264**	IN ...	**300**
	RIGHT	**30**	OUT ...	**230**		RIGHT	**21**	OUT ...	**320**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**420**	BOUND	THRU	**279**	IN ...	**550**
	RIGHT	**7**	OUT ...	**360**		RIGHT	**14**	OUT ...	**330**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**17**	NORTH LEG	NORTH	LEFT	**14**	**26**	NORTH LEG
BOUND	THRU	**3**	**4**	RATIO **7.8%**	BOUND	THRU	**5**	**17**	RATIO **8.8%**
	RIGHT	**65**	**65**	ADT 900		RIGHT	**37**	**48**	ADT 900
SOUTH	LEFT	**5**	**15**	SOUTH LEG	SOUTH	LEFT	**7**	**17**	SOUTH LEG
BOUND	THRU	**12**	**35**	RATIO **8.9%**	BOUND	THRU	**3**	**10**	RATIO **9.3%**
	RIGHT	**0**	**0**	ADT 4,000		RIGHT	**1**	**3**	ADT 4,000
EAST	LEFT	**3**	**5**	EAST LEG	EAST	LEFT	**2**	**5**	EAST LEG
BOUND	THRU	**277**	**279**	RATIO **7.7%**	BOUND	THRU	**264**	**266**	RATIO **8.7%**
	RIGHT	**30**	**30**	ADT 10,200		RIGHT	**21**	**29**	ADT 10,200
WEST	LEFT	**202**	**203**	WEST LEG	WEST	LEFT	**240**	**241**	WEST LEG
BOUND	THRU	**202**	**214**	RATIO **7.8%**	BOUND	THRU	**279**	**290**	RATIO **8.8%**
	RIGHT	**7**	**11**	ADT 7,000		RIGHT	**14**	**27**	ADT 7,000

Beekly Road (NS) at: Phelan Road (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**16**	SOUTH LEG		NORTH	LEFT	**14**	SOUTH LEG	
BOUND	THRU	**3**	IN ...	**90**	BOUND	THRU	**5**	IN ...	**120**
	RIGHT	**65**	OUT ...	**290**		RIGHT	**37**	OUT ...	**280**
SOUTH	LEFT	**5**	NORTH LEG		SOUTH	LEFT	**7**	NORTH LEG	
BOUND	THRU	**12**	IN ...	**90**	BOUND	THRU	**3**	IN ...	**50**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**1**	OUT ...	**70**
EAST	LEFT	**3**	WEST LEG		EAST	LEFT	**2**	WEST LEG	
BOUND	THRU	**277**	IN ...	**330**	BOUND	THRU	**264**	IN ...	**310**
	RIGHT	**30**	OUT ...	**250**		RIGHT	**21**	OUT ...	**330**
WEST	LEFT	**202**	EAST LEG		WEST	LEFT	**240**	EAST LEG	
BOUND	THRU	**202**	IN ...	**440**	BOUND	THRU	**279**	IN ...	**570**
	RIGHT	**7**	OUT ...	**370**		RIGHT	**14**	OUT ...	**330**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**16**	**20**	NORTH LEG	NORTH	LEFT	**14**	**35**	NORTH LEG
BOUND	THRU	**3**	**9**	RATIO **8.7%**	BOUND	THRU	**5**	**29**	RATIO **7.9%**
	RIGHT	**65**	**72**	ADT 1,500		RIGHT	**37**	**52**	ADT 1,500
SOUTH	LEFT	**5**	**25**	SOUTH LEG	SOUTH	LEFT	**7**	**24**	SOUTH LEG
BOUND	THRU	**12**	**65**	RATIO **9.6%**	BOUND	THRU	**3**	**17**	RATIO **9.8%**
	RIGHT	**0**	**0**	ADT 4,400		RIGHT	**1**	**6**	ADT 4,400
EAST	LEFT	**3**	**10**	EAST LEG	EAST	LEFT	**2**	**8**	EAST LEG
BOUND	THRU	**277**	**285**	RATIO **8.0%**	BOUND	THRU	**264**	**291**	RATIO **8.9%**
	RIGHT	**30**	**34**	ADT 10,700		RIGHT	**21**	**33**	ADT 10,700
WEST	LEFT	**202**	**223**	WEST LEG	WEST	LEFT	**240**	**264**	WEST LEG
BOUND	THRU	**202**	**230**	RATIO **7.8%**	BOUND	THRU	**279**	**289**	RATIO **8.9%**
	RIGHT	**7**	**20**	ADT 7,400		RIGHT	**14**	**33**	ADT 7,400

Clovis Road (NS) at: Phelan Road (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					17	3	9			
					<	v	>			
			15	^				^	24	
			245	>				<	249	
			36	v				v	14	
					<	^	>			
					31	5	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						29	44			
						v	^			
			297	<	IN	=	686	<	287	
			296	>	OUT	=	686	>	292	
						v	^			
						53	74			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					0	0	5			
					<	v	>			
			2	^				^	7	
			54	>				<	158	
			2	v				v	12	
					<	^	>			
					9	0	5			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					17	3	14			
					<	v	>			
			17	^				^	31	
			299	>				<	407	
			38	v				v	26	
					<	^	>			
					40	5	43			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			197	<	IN	=	510	<	**197**	
			311	>	OUT	=	511	>	**314**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			8	<	IN	=	17	<	**8**	
			7	>	OUT	=	18	>	**10**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						1	0			
						v	^			
			78	<	IN	=	199	<	78	
			121	>	OUT	=	200	>	123	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			290	<	IN	=	646	<	**290**	
			354	>	OUT	=	646	>	**356**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2				
						1	**0**			
						v	^			
			15	<	IN	=	27	<	**15**	
			11	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						1	0			
						v	^			
			115	<	IN	=	254	<	115	
			138	>	OUT	=	255	>	140	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						0	0			
						v	^			
			38	<				<	38	
			18	>				>	17	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						0	10			
						v	^			
			50	<	IN	=	90	<	50	
			40	>	OUT	=	100	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

						0	0			
						v	^			
			20	<				<	20	
			10	>				>	10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					27	36	24			
					<	v	>			
			28	^				^	83	
			224	>				<	404	
			33	v				v	50	
					<	^	>			
					75	24	75			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						87	135			
						v	^			
			506	<	IN	=	1083	<	537	
			285	>	OUT	=	1083	>	323	
						v	^			
						119	174			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	2	2			
					<	v	>			
			2	^				^	7	
			33	>				<	46	
			3	v				v	6	
					<	^	>			
					14	3	6			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					29	38	26			
					<	v	>			
			30	^				^	90	
			257	>				<	450	
			36	v				v	56	
					<	^	>			
					89	27	81			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						2	**0**			
						v	^			
			500	<	IN	=	952	<	**500**	
			450	>	OUT	=	954	>	**454**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**0**			
						v	^			
			9	<	IN	=	27	<	**9**	
			16	>	OUT	=	29	>	**20**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						1	0			
						v	^			
			142	<	IN	=	273	<	142	
			130	>	OUT	=	274	>	132	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						2	**0**			
						v	^			
			616	<	IN	=	1138	<	**616**	
			520	>	OUT	=	1140	>	**524**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**0**			
						v	^			
			23	<	IN	=	51	<	**23**	
			26	>	OUT	=	52	>	**29**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						1	0			
						v	^			
			178	<	IN	=	331	<	178	
			152	>	OUT	=	332	>	154	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						0	0			
						v	^			
			36	<				<	36	
			22	>				>	22	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						10	10			
						v	^			
			60	<	IN	=	100	<	60	
			30	>	OUT	=	110	>	40	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

						0	0			
						v	^			
			20	<				<	20	
			10	>				>	10	
						v	^			
						0	0			

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**90**
	RIGHT	**17**	OUT ...	**50**		RIGHT	**29**	OUT ...	**150**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**360**	BOUND	THRU	**257**	IN ...	**330**
	RIGHT	**38**	OUT ...	**480**		RIGHT	**36**	OUT ...	**590**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**490**	BOUND	THRU	**450**	IN ...	**620**
	RIGHT	**31**	OUT ...	**370**		RIGHT	**90**	OUT ...	**370**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**41**	NORTH LEG	NORTH	LEFT	**89**	**91**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.1%**	BOUND	THRU	**27**	**27**	RATIO **8.5%**
	RIGHT	**43**	**44**	ADT 2,900		RIGHT	**81**	**82**	ADT 2,900
SOUTH	LEFT	**14**	**15**	SOUTH LEG	SOUTH	LEFT	**26**	**27**	SOUTH LEG
BOUND	THRU	**3**	**3**	RATIO **4.0%**	BOUND	THRU	**38**	**39**	RATIO **8.3%**
	RIGHT	**17**	**18**	ADT 4,000		RIGHT	**29**	**30**	ADT 4,000
EAST	LEFT	**17**	**18**	EAST LEG	EAST	LEFT	**30**	**31**	EAST LEG
BOUND	THRU	**299**	**309**	RATIO **7.4%**	BOUND	THRU	**257**	**263**	RATIO **8.6%**
	RIGHT	**38**	**39**	ADT 11,500		RIGHT	**36**	**36**	ADT 11,500
WEST	LEFT	**26**	**26**	WEST LEG	WEST	LEFT	**56**	**58**	WEST LEG
BOUND	THRU	**407**	**428**	RATIO **8.0%**	BOUND	THRU	**450**	**471**	RATIO **8.6%**
	RIGHT	**31**	**32**	ADT 10,700		RIGHT	**90**	**92**	ADT 10,700

Clovis Road (NS) at: Phelan Road (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**40**	SOUTH LEG		NORTH	LEFT	**89**	SOUTH LEG	
BOUND	THRU	**5**	IN ...	**90**	BOUND	THRU	**27**	IN ...	**200**
	RIGHT	**43**	OUT ...	**70**		RIGHT	**81**	OUT ...	**130**
SOUTH	LEFT	**14**	NORTH LEG		SOUTH	LEFT	**26**	NORTH LEG	
BOUND	THRU	**3**	IN ...	**30**	BOUND	THRU	**38**	IN ...	**100**
	RIGHT	**17**	OUT ...	**60**		RIGHT	**29**	OUT ...	**160**
EAST	LEFT	**17**	WEST LEG		EAST	LEFT	**30**	WEST LEG	
BOUND	THRU	**299**	IN ...	**380**	BOUND	THRU	**257**	IN ...	**340**
	RIGHT	**38**	OUT ...	**500**		RIGHT	**36**	OUT ...	**620**
WEST	LEFT	**26**	EAST LEG		WEST	LEFT	**56**	EAST LEG	
BOUND	THRU	**407**	IN ...	**500**	BOUND	THRU	**450**	IN ...	**650**
	RIGHT	**31**	OUT ...	**390**		RIGHT	**90**	OUT ...	**390**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**40**	**40**	NORTH LEG	NORTH	LEFT	**89**	**90**	NORTH LEG
BOUND	THRU	**5**	**5**	RATIO **3.2%**	BOUND	THRU	**27**	**28**	RATIO **8.4%**
	RIGHT	**43**	**46**	ADT 3,100		RIGHT	**81**	**84**	ADT 3,100
SOUTH	LEFT	**14**	**16**	SOUTH LEG	SOUTH	LEFT	**26**	**30**	SOUTH LEG
BOUND	THRU	**3**	**4**	RATIO **3.9%**	BOUND	THRU	**38**	**39**	RATIO **8.0%**
	RIGHT	**17**	**19**	ADT 4,200		RIGHT	**29**	**32**	ADT 4,200
EAST	LEFT	**17**	**19**	EAST LEG	EAST	LEFT	**30**	**32**	EAST LEG
BOUND	THRU	**299**	**331**	RATIO **7.5%**	BOUND	THRU	**257**	**276**	RATIO **8.6%**
	RIGHT	**38**	**39**	ADT 12,100		RIGHT	**36**	**40**	ADT 12,100
WEST	LEFT	**26**	**28**	WEST LEG	WEST	LEFT	**56**	**57**	WEST LEG
BOUND	THRU	**407**	**445**	RATIO **8.0%**	BOUND	THRU	**450**	**498**	RATIO **8.6%**
	RIGHT	**31**	**36**	ADT 11,200		RIGHT	**90**	**101**	ADT 11,200

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	86	94			
					<	v	>			
			39	^				^		29
			214	>				<		300
			32	v				v		122
					<	^	>			
					52	92	101			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						257	160			
						v	^			
			429	<	IN	=	1238	<		451
			285	>	OUT	=	1238	>		409
						v	^			
						240	245			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					13	5	20			
					<	v	>			
			9	^				^		3
			56	>				<		68
			8	v				v		5
					<	^	>			
					15	20	18			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					90	91	114			
					<	v	>			
			48	^				^		32
			270	>				<		368
			40	v				v		127
					<	^	>			
					67	112	119			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						720	**305**			
						v	^			
			197	<	IN	=	2198	<		**793**
			314	>	OUT	=	2197	>		**502**
						v	^			
						1193	**371**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						7	**10**			
						v	^			
			8	<	IN	=	41	<		**13**
			10	>	OUT	=	40	>		**12**
						v	^			
						10	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						276	119			
						v	^			
			78	<	IN	=	849	<		306
			123	>	OUT	=	848	>		195
						v	^			
						457	145			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						674	**289**			
						v	^			
			290	<	IN	=	2869	<		**1412**
			356	>	OUT	=	2867	>		**586**
						v	^			
						1702	**427**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						11	**8**			
						v	^			
			15	<	IN	=	71	<		**35**
			14	>	OUT	=	69	>		**17**
						v	^			
						29	**11**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						260	112			
						v	^			
			115	<	IN	=	1114	<		548
			140	>	OUT	=	1112	>		228
						v	^			
						656	166			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						-16	-7			
						v	^			
			38	<				<		243
			17	>				>		34
						v	^			
						200	21			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
			50	<	IN	=	330	<		240
			40	>	OUT	=	320	>		50
						v	^			
						200	20			

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

						10	10			
						v	^			
			20	<				<		90
			10	>				>		20
						v	^			
						70	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					95	87	111			
					<	v	>			
			83	^				^		45
			270	>				<		363
			36	v				v		99
					<	^	>			
					106	145	171			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						293	273			
						v	^			
			564	<	IN	=	1611	<		507
			389	>	OUT	=	1611	>		552
						v	^			
						222	422			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					12	4	7			
					<	v	>			
			2	^				^		10
			40	>				<		50
			0	v				v		9
					<	^	>			
					5	14	17			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					107	91	118			
					<	v	>			
			85	^				^		55
			310	>				<		413
			36	v				v		108
					<	^	>			
					111	159	188			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						588	**830**			
						v	^			
			500	<	IN	=	3381	<		**945**
			454	>	OUT	=	3378	>		**1212**
						v	^			
						836	**1394**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						12	**10**			
						v	^			
			9	<	IN	=	61	<		**18**
			20	>	OUT	=	58	>		**21**
						v	^			
						18	**11**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						168	235			
						v	^			
			142	<	IN	=	962	<		269
			132	>	OUT	=	960	>		345
						v	^			
						239	393			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						541	**809**			
						v	^			
			616	<	IN	=	4205	<		**1204**
			524	>	OUT	=	4204	>		**1782**
						v	^			
						997	**1936**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						12	**16**			
						v	^			
			23	<	IN	=	113	<		**42**
			29	>	OUT	=	110	>		**43**
						v	^			
						28	**30**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						154	231			
						v	^			
			178	<	IN	=	1206	<		348
			154	>	OUT	=	1205	>		510
						v	^			
						286	550			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						-13	-4			
						v	^			
			36	<				<		79
			22	>				>		165
						v	^			
						48	157			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	30			
						v	^			
			60	<	IN	=	310	<		80
			40	>	OUT	=	310	>		170
						v	^			
						50	160			

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

						10	10			
						v	^			
			20	<				<		30
			10	>				>		60
						v	^			
						20	60			

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**310**	BOUND	THRU	**159**	IN ...	**520**
	RIGHT	**119**	OUT ...	**330**		RIGHT	**188**	OUT ...	**260**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**310**	BOUND	THRU	**91**	IN ...	**330**
	RIGHT	**90**	OUT ...	**200**		RIGHT	**107**	OUT ...	**310**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**370**	BOUND	THRU	**310**	IN ...	**440**
	RIGHT	**40**	OUT ...	**550**		RIGHT	**36**	OUT ...	**650**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**620**	BOUND	THRU	**413**	IN ...	**610**
	RIGHT	**32**	OUT ...	**520**		RIGHT	**55**	OUT ...	**680**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**68**	NORTH LEG	NORTH	LEFT	**111**	**119**	NORTH LEG
BOUND	THRU	**112**	**116**	RATIO **7.0%**	BOUND	THRU	**159**	**173**	RATIO **8.9%**
	RIGHT	**119**	**128**	ADT 7,400		RIGHT	**188**	**228**	ADT 7,400
SOUTH	LEFT	**114**	**118**	SOUTH LEG	SOUTH	LEFT	**118**	**129**	SOUTH LEG
BOUND	THRU	**91**	**107**	RATIO **7.4%**	BOUND	THRU	**91**	**98**	RATIO **9.0%**
	RIGHT	**90**	**92**	ADT 8,700		RIGHT	**107**	**110**	ADT 8,700
EAST	LEFT	**48**	**50**	EAST LEG	EAST	LEFT	**85**	**87**	EAST LEG
BOUND	THRU	**270**	**274**	RATIO **7.8%**	BOUND	THRU	**310**	**323**	RATIO **8.8%**
	RIGHT	**40**	**46**	ADT 14,600		RIGHT	**36**	**37**	ADT 14,600
WEST	LEFT	**127**	**176**	WEST LEG	WEST	LEFT	**108**	**125**	WEST LEG
BOUND	THRU	**368**	**402**	RATIO **7.3%**	BOUND	THRU	**413**	**427**	RATIO **8.6%**
	RIGHT	**32**	**37**	ADT 12,800		RIGHT	**55**	**58**	ADT 12,800

Sheep Creek Road (NS) at: Phelan Road (EW) - #3

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**67**	SOUTH LEG		NORTH	LEFT	**111**	SOUTH LEG	
BOUND	THRU	**112**	IN ...	**320**	BOUND	THRU	**159**	IN ...	**580**
	RIGHT	**119**	OUT ...	**420**		RIGHT	**188**	OUT ...	**280**
SOUTH	LEFT	**114**	NORTH LEG		SOUTH	LEFT	**118**	NORTH LEG	
BOUND	THRU	**91**	IN ...	**320**	BOUND	THRU	**91**	IN ...	**340**
	RIGHT	**90**	OUT ...	**210**		RIGHT	**107**	OUT ...	**320**
EAST	LEFT	**48**	WEST LEG		EAST	LEFT	**85**	WEST LEG	
BOUND	THRU	**270**	IN ...	**390**	BOUND	THRU	**310**	IN ...	**460**
	RIGHT	**40**	OUT ...	**570**		RIGHT	**36**	OUT ...	**680**
WEST	LEFT	**127**	EAST LEG		WEST	LEFT	**108**	EAST LEG	
BOUND	THRU	**368**	IN ...	**720**	BOUND	THRU	**413**	IN ...	**640**
	RIGHT	**32**	OUT ...	**540**		RIGHT	**55**	OUT ...	**750**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**67**	**74**	NORTH LEG	NORTH	LEFT	**111**	**131**	NORTH LEG
BOUND	THRU	**112**	**120**	RATIO **7.1%**	BOUND	THRU	**159**	**184**	RATIO **8.9%**
	RIGHT	**119**	**136**	ADT 7,800		RIGHT	**188**	**268**	ADT 7,800
SOUTH	LEFT	**114**	**118**	SOUTH LEG	SOUTH	LEFT	**118**	**136**	SOUTH LEG
BOUND	THRU	**91**	**124**	RATIO **8.0%**	BOUND	THRU	**91**	**103**	RATIO **9.2%**
	RIGHT	**90**	**99**	ADT 9,400		RIGHT	**107**	**118**	ADT 9,400
EAST	LEFT	**48**	**53**	EAST LEG	EAST	LEFT	**85**	**94**	EAST LEG
BOUND	THRU	**270**	**285**	RATIO **8.0%**	BOUND	THRU	**310**	**346**	RATIO **8.9%**
	RIGHT	**40**	**55**	ADT 15,700		RIGHT	**36**	**39**	ADT 15,700
WEST	LEFT	**127**	**241**	WEST LEG	WEST	LEFT	**108**	**138**	WEST LEG
BOUND	THRU	**368**	**432**	RATIO **7.5%**	BOUND	THRU	**413**	**447**	RATIO **8.8%**
	RIGHT	**32**	**43**	ADT 13,400		RIGHT	**55**	**58**	ADT 13,400

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				58	168	13		
				<	v	>		
		21	^				^	21
		39	>				<	87
		22	v				v	71
				<	^	>		
				58	268	125		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					239	310		
					v	^		
		203	<	IN	=	951	<	179
		82	>	OUT	=	951	>	177
					v	^		
					261	451		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				6	11	4		
				<	v	>		
		11	^				^	3
		7	>				<	5
		5	v				v	9
				<	^	>		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

					7	25	24	

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				64	179	17		
				<	v	>		
		32	^				^	24
		46	>				<	92
		27	v				v	80
				<	^	>		
				65	293	149		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					1193	**371**		
					v	^		
		694	<	IN	=	1564	<	**0**
		76	>	OUT	=	1564	>	**0**
					v	^		
					499	**295**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					10	**11**		
					v	^		
		0	<	IN	=	20	<	**0**
		0	>	OUT	=	21	>	**0**
					v	^		
					10	**10**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					457	145		
					v	^		
		264	<	IN	=	601	<	0
		29	>	OUT	=	601	>	0
					v	^		
					193	115		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					1702	**427**		
					v	^		
		754	<	IN	=	2129	<	**0**
		97	>	OUT	=	2129	>	**0**
					v	^		
					948	**330**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					29	**11**		
					v	^		
		1	<	IN	=	40	<	**0**
		1	>	OUT	=	40	>	**0**
					v	^		
					28	**10**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					656	166		
					v	^		
		287	<	IN	=	822	<	0
		37	>	OUT	=	822	>	0
					v	^		
					370	129		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					200	21		
					v	^		
		23	<				<	0
		8	>				>	0
					v	^		
					177	13		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					200	30		
					v	^		
		20	<	IN	=	240	<	20
		10	>	OUT	=	250	>	20
					v	^		
					180	10		

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

					70	10		
					v	^		
		10	<				<	10
		0	>				>	10
					v	^		
					70	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				90	92	14		
				<	v	>		
		28	^				^	30
		35	>				<	50
		19	v				v	51
				<	^	>		
				54	359	193		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					196	417		
					v	^		
		194	<	IN	=	1015	<	131
		82	>	OUT	=	1015	>	242
					v	^		
					162	606		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				5	5	2		
				<	v	>		
		0	^				^	3
		2	>				<	2
		0	v				v	0
				<	^	>		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

					2	46	30	

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				95	97	16		
				<	v	>		
		28	^				^	33
		37	>				<	52
		19	v				v	51
				<	^	>		
				56	405	223		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					836	**1394**		
					v	^		
		178	<	IN	=	2229	<	**0**
		677	>	OUT	=	2230	>	**0**
					v	^		
					658	**716**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					18	**11**		
					v	^		
		1	<	IN	=	30	<	**0**
		1	>	OUT	=	29	>	**0**
					v	^		
					17	**11**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					239	393		
					v	^		
		50	<	IN	=	632	<	0
		190	>	OUT	=	632	>	0
					v	^		
					188	203		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					997	**1936**		
					v	^		
		212	<	IN	=	2933	<	**0**
		745	>	OUT	=	2933	>	**0**
					v	^		
					785	**1191**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					28	**30**		
					v	^		
		1	<	IN	=	58	<	**0**
		1	>	OUT	=	58	>	**0**
					v	^		
					27	**29**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					286	550		
					v	^		
		60	<	IN	=	836	<	0
		209	>	OUT	=	836	>	0
					v	^		
					227	341		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					48	157		
					v	^		
		10	<				<	0
		19	>				>	0
					v	^		
					38	138		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					50	160		
					v	^		
		20	<	IN	=	220	<	10
		20	>	OUT	=	250	>	30
					v	^		
					40	140		

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

					20	60		
					v	^		
		10	<				<	0
		10	>				>	10
					v	^		
					10	50		

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**510**	BOUND	THRU	**405**	IN ...	**740**
	RIGHT	**149**	OUT ...	**360**		RIGHT	**223**	OUT ...	**180**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**330**	BOUND	THRU	**97**	IN ...	**230**
	RIGHT	**64**	OUT ...	**360**		RIGHT	**95**	OUT ...	**530**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**110**	BOUND	THRU	**37**	IN ...	**90**
	RIGHT	**27**	OUT ...	**230**		RIGHT	**19**	OUT ...	**210**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**210**	BOUND	THRU	**52**	IN ...	**140**
	RIGHT	**24**	OUT ...	**220**		RIGHT	**33**	OUT ...	**290**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**67**	NORTH LEG	NORTH	LEFT	**56**	**58**	NORTH LEG
BOUND	THRU	**293**	**301**	RATIO **8.2%**	BOUND	THRU	**405**	**460**	RATIO **9.0%**
	RIGHT	**149**	**151**	ADT 8,500		RIGHT	**223**	**232**	ADT 8,500
SOUTH	LEFT	**17**	**21**	SOUTH LEG	SOUTH	LEFT	**16**	**19**	SOUTH LEG
BOUND	THRU	**179**	**238**	RATIO **8.5%**	BOUND	THRU	**97**	**109**	RATIO **8.9%**
	RIGHT	**64**	**74**	ADT 10,400		RIGHT	**95**	**104**	ADT 10,400
EAST	LEFT	**32**	**33**	EAST LEG	EAST	LEFT	**28**	**32**	EAST LEG
BOUND	THRU	**46**	**48**	RATIO **8.8%**	BOUND	THRU	**37**	**39**	RATIO **8.9%**
	RIGHT	**27**	**30**	ADT 4,900		RIGHT	**19**	**19**	ADT 4,900
WEST	LEFT	**80**	**93**	WEST LEG	WEST	LEFT	**51**	**52**	WEST LEG
BOUND	THRU	**92**	**94**	RATIO **9.9%**	BOUND	THRU	**52**	**54**	RATIO **8.7%**
	RIGHT	**24**	**26**	ADT 3,500		RIGHT	**33**	**38**	ADT 3,500

Sheep Creek Road (NS) at: Nielson Road (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**65**	SOUTH LEG		NORTH	LEFT	**56**	SOUTH LEG	
BOUND	THRU	**293**	IN ...	**520**	BOUND	THRU	**405**	IN ...	**790**
	RIGHT	**149**	OUT ...	**430**		RIGHT	**223**	OUT ...	**200**
SOUTH	LEFT	**17**	NORTH LEG		SOUTH	LEFT	**16**	NORTH LEG	
BOUND	THRU	**179**	IN ...	**420**	BOUND	THRU	**97**	IN ...	**250**
	RIGHT	**64**	OUT ...	**370**		RIGHT	**95**	OUT ...	**590**
EAST	LEFT	**32**	WEST LEG		EAST	LEFT	**28**	WEST LEG	
BOUND	THRU	**46**	IN ...	**120**	BOUND	THRU	**37**	IN ...	**100**
	RIGHT	**27**	OUT ...	**240**		RIGHT	**19**	OUT ...	**220**
WEST	LEFT	**80**	EAST LEG		WEST	LEFT	**51**	EAST LEG	
BOUND	THRU	**92**	IN ...	**220**	BOUND	THRU	**52**	IN ...	**150**
	RIGHT	**24**	OUT ...	**230**		RIGHT	**33**	OUT ...	**300**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**65**	**72**	NORTH LEG	NORTH	LEFT	**56**	**62**	NORTH LEG
BOUND	THRU	**293**	**306**	RATIO **8.6%**	BOUND	THRU	**405**	**510**	RATIO **9.2%**
	RIGHT	**149**	**152**	ADT 9,200		RIGHT	**223**	**238**	ADT 9,200
SOUTH	LEFT	**17**	**27**	SOUTH LEG	SOUTH	LEFT	**16**	**20**	SOUTH LEG
BOUND	THRU	**179**	**301**	RATIO **8.7%**	BOUND	THRU	**97**	**122**	RATIO **9.2%**
	RIGHT	**64**	**89**	ADT 11,000		RIGHT	**95**	**111**	ADT 11,000
EAST	LEFT	**32**	**36**	EAST LEG	EAST	LEFT	**28**	**38**	EAST LEG
BOUND	THRU	**46**	**51**	RATIO **8.6%**	BOUND	THRU	**37**	**42**	RATIO **8.7%**
	RIGHT	**27**	**32**	ADT 5,200		RIGHT	**19**	**22**	ADT 5,200
WEST	LEFT	**80**	**97**	WEST LEG	WEST	LEFT	**51**	**56**	WEST LEG
BOUND	THRU	**92**	**93**	RATIO **10.4%**	BOUND	THRU	**52**	**53**	RATIO **9.1%**
	RIGHT	**24**	**28**	ADT 3,600		RIGHT	**33**	**43**	ADT 3,600

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		402	>				<	575
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					2	1		
					v	^		
		578	<	IN =	1001	<	586	
		404	>	OUT =	1001	>	410	
					v	^		
					12	9		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		64	>				<	52
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				0	0	2		
				<	v	>		
		0	^				^	1
		466	>				<	627
		2	v				v	10
				<	^	>		
				3	0	6		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		793	<	IN =	1295	<	**793**	
		502	>	OUT =	1295	>	**502**	
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		13	<	IN =	25	<	**13**	
		12	>	OUT =	25	>	**12**	
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		306	<	IN =	500	<	306	
		195	>	OUT =	500	>	195	
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1412	<	IN =	1998	<	**1412**	
		586	>	OUT =	1998	>	**586**	
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		35	<	IN =	52	<	**35**	
		17	>	OUT =	52	>	**17**	
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		548	<	IN =	777	<	548	
		228	>	OUT =	777	>	228	
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					v	^		
		243	<			<	243	
		34	>			>	34	
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		240	<	IN =	290	<	240	
		50	>	OUT =	290	>	50	
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO **2024**

8 YEARS

					0	0		
					v	^		
		70	<			<	70	
		10	>			>	10	
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		637	>				<	524
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2016

					7	5		
					v	^		
		536	<	IN =	1206	<	540	
		642	>	OUT =	1206	>	649	
					v	^		
					16	17		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^				^	0
		61	>				<	24
		0	v				v	0
				<	^	>		
				0	0	0		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2016

				2	0	5		
				<	v	>		
		3	^				^	2
		698	>				<	548
		2	v				v	14
				<	^	>		
				10	0	7		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		945	<	IN =	2157	<	**945**	
		1212	>	OUT =	2157	>	**1212**	
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		18	<	IN =	39	<	**18**	
		21	>	OUT =	39	>	**21**	
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		269	<	IN =	614	<	269	
		345	>	OUT =	614	>	345	
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1204	<	IN =	2986	<	**1204**	
		1782	>	OUT =	2986	>	**1782**	
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		42	<	IN =	85	<	**42**	
		43	>	OUT =	85	>	**43**	
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		348	<	IN =	857	<	348	
		510	>	OUT =	857	>	510	
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					v	^		
		79	<			<	79	
		165	>			>	165	
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		80	<	IN =	250	<	80	
		170	>	OUT =	250	>	170	
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2016 TO 2024

8 YEARS

					0	0		
					v	^		
		20	<			<	20	
		50	>			>	50	
					v	^		
					0	0		

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**480**	BOUND	THRU	**698**	IN ...	**760**
	RIGHT	**2**	OUT ...	**710**		RIGHT	**2**	OUT ...	**580**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**710**	BOUND	THRU	**548**	IN ...	**580**
	RIGHT	**1**	OUT ...	**480**		RIGHT	**2**	OUT ...	**760**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**10**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **15.8%**
	RIGHT	**6**	**6**	ADT 101		RIGHT	**7**	**8**	ADT 101
SOUTH	LEFT	**2**	**2**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.2%**	BOUND	THRU	**0**	**0**	RATIO **8.6%**
	RIGHT	**0**	**0**	ADT 406		RIGHT	**2**	**2**	ADT 406
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**3**	EAST LEG
BOUND	THRU	**466**	**474**	RATIO **8.6%**	BOUND	THRU	**698**	**745**	RATIO **9.6%**
	RIGHT	**2**	**2**	ADT 14,000		RIGHT	**2**	**3**	ADT 14,000
WEST	LEFT	**10**	**10**	WEST LEG	WEST	LEFT	**14**	**14**	WEST LEG
BOUND	THRU	**627**	**706**	RATIO **8.5%**	BOUND	THRU	**548**	**565**	RATIO **9.5%**
	RIGHT	**1**	**1**	ADT 14,000		RIGHT	**2**	**4**	ADT 14,000

Sierra Vista Road (NS) at: Phelan Road (EW) - #5

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**3**	SOUTH LEG		NORTH	LEFT	**10**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**10**	BOUND	THRU	**0**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**7**	OUT ...	**20**
SOUTH	LEFT	**2**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**3**	WEST LEG	
BOUND	THRU	**466**	IN ...	**510**	BOUND	THRU	**698**	IN ...	**820**
	RIGHT	**2**	OUT ...	**800**		RIGHT	**2**	OUT ...	**620**
WEST	LEFT	**10**	EAST LEG		WEST	LEFT	**14**	EAST LEG	
BOUND	THRU	**627**	IN ...	**810**	BOUND	THRU	**548**	IN ...	**620**
	RIGHT	**1**	OUT ...	**510**		RIGHT	**2**	OUT ...	**830**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**3**	**3**	NORTH LEG	NORTH	LEFT	**10**	**12**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO **4.5%**	BOUND	THRU	**0**	**0**	RATIO **18.2%**
	RIGHT	**6**	**7**	ADT 110		RIGHT	**7**	**8**	ADT 110
SOUTH	LEFT	**2**	**3**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **5.5%**	BOUND	THRU	**0**	**0**	RATIO **9.1%**
	RIGHT	**0**	**0**	ADT 440		RIGHT	**2**	**3**	ADT 440
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**3**	**6**	EAST LEG
BOUND	THRU	**466**	**513**	RATIO **8.5%**	BOUND	THRU	**698**	**815**	RATIO **9.3%**
	RIGHT	**2**	**3**	ADT 15,700		RIGHT	**2**	**3**	ADT 15,700
WEST	LEFT	**10**	**11**	WEST LEG	WEST	LEFT	**14**	**17**	WEST LEG
BOUND	THRU	**627**	**797**	RATIO **8.4%**	BOUND	THRU	**548**	**605**	RATIO **9.2%**
	RIGHT	**1**	**2**	ADT 15,700		RIGHT	**2**	**4**	ADT 15,700

Project Driveway (NS) at: Phelan Road (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		419 <	IN =		778 <	419		
		359 >	OUT =		778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		793 <	IN =		1295 <	**793**		
		502 >	OUT =		1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		13 <	IN =		25 <	**13**		
		12 >	OUT =		25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
		306 <	IN =		500 <	306		
		195 >	OUT =		500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1412 <	IN =		1998 <	**1412**		
		586 >	OUT =		1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		35 <	IN =		52 <	**35**		
		17 >	OUT =		52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
		548 <	IN =		777 <	548		
		228 >	OUT =		777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
		243 <			<	243		
		34 >			>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		240 <	IN =		280 <	240		
		40 >	OUT =		280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

				0	0			
				v	^			
		90 <			<	90		
		10 >			>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		510 <	IN =		1077 <	510		
		567 >	OUT =		1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		945 <	IN =		2157 <	**945**		
		1212 >	OUT =		2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		18 <	IN =		39 <	**18**		
		21 >	OUT =		39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
		269 <	IN =		614 <	269		
		345 >	OUT =		614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1204 <	IN =		2986 <	**1204**		
		1782 >	OUT =		2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		42 <	IN =		85 <	**42**		
		43 >	OUT =		85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
		348 <	IN =		857 <	348		
		510 >	OUT =		857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
		79 <			<	79		
		165 >			>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		80 <	IN =		250 <	80		
		170 >	OUT =		250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

				0	0			
				v	^			
		30 <			<	30		
		60 >			>	60		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**680**
	RIGHT	**0**	OUT ...	**630**		RIGHT	**0**	OUT ...	**600**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**630**	BOUND	THRU	**568**	IN ...	**600**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**680**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.3%**	BOUND	THRU	**621**	**680**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**630**	RATIO **7.3%**	BOUND	THRU	**568**	**600**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600

Project Driveway (NS) at: Phelan Road (EW) - #6

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**450**	BOUND	THRU	**621**	IN ...	**750**
	RIGHT	**0**	OUT ...	**730**		RIGHT	**0**	OUT ...	**630**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**730**	BOUND	THRU	**568**	IN ...	**630**
	RIGHT	**0**	OUT ...	**450**		RIGHT	**0**	OUT ...	**750**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**450**	RATIO **7.5%**	BOUND	THRU	**621**	**750**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 15,700		RIGHT	**0**	**0**	ADT 15,700
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**730**	RATIO **7.5%**	BOUND	THRU	**568**	**630**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 15,700		RIGHT	**0**	**0**	ADT 15,700

Project Driveway (NS) at: Phelan Road (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		359 >				<	419	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		419 <	IN =		778 <	419		
		359 >	OUT =		778 >	359		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		64 >				<	125	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		423 >				<	544	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		793 <	IN =		1295 <	**793**		
		502 >	OUT =		1295 >	**502**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		13 <	IN =		25 <	**13**		
		12 >	OUT =		25 >	**12**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				0	0			
				v	^			
		306 <	IN =		500 <	306		
		195 >	OUT =		500 >	195		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1412 <	IN =		1998 <	**1412**		
		586 >	OUT =		1998 >	**586**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		35 <	IN =		52 <	**35**		
		17 >	OUT =		52 >	**17**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
		548 <	IN =		777 <	548		
		228 >	OUT =		777 >	228		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				0	0			
				v	^			
		243 <			<	243		
		34 >			>	34		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		240 <	IN =		280 <	240		
		40 >	OUT =		280 >	40		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

				0	0			
				v	^			
		90 <			<	90		
		10 >			>	10		
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		567 >				<	510	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
		510 <	IN =		1077 <	510		
		567 >	OUT =		1077 >	567		
				v	^			
				0	0			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		54 >				<	58	
		0 v				v	0	
			<	^	>			
			0	0	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		621 >				<	568	
		0 v				v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				v	^			
		945 <	IN =		2157 <	**945**		
		1212 >	OUT =		2157 >	**1212**		
				v	^			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				v	^			
		18 <	IN =		39 <	**18**		
		21 >	OUT =		39 >	**21**		
				v	^			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				0	0			
				v	^			
		269 <	IN =		614 <	269		
		345 >	OUT =		614 >	345		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				v	^			
		1204 <	IN =		2986 <	**1204**		
		1782 >	OUT =		2986 >	**1782**		
				v	^			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				v	^			
		42 <	IN =		85 <	**42**		
		43 >	OUT =		85 >	**43**		
				v	^			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
		348 <	IN =		857 <	348		
		510 >	OUT =		857 >	510		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				0	0			
				v	^			
		79 <			<	79		
		165 >			>	165		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				0	0			
				v	^			
		80 <	IN =		250 <	80		
		170 >	OUT =		250 >	170		
				v	^			
				0	0			

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

				0	0			
				v	^			
		30 <			<	30		
		60 >			>	60		
				v	^			
				0	0			

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**430**	BOUND	THRU	**621**	IN ...	**680**
	RIGHT	**0**	OUT ...	**630**		RIGHT	**0**	OUT ...	**600**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**630**	BOUND	THRU	**568**	IN ...	**600**
	RIGHT	**0**	OUT ...	**430**		RIGHT	**0**	OUT ...	**680**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**430**	RATIO **7.3%**	BOUND	THRU	**621**	**680**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**630**	RATIO **7.3%**	BOUND	THRU	**568**	**600**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 14,600		RIGHT	**0**	**0**	ADT 14,600

Project Driveway (NS) at: Phelan Road (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**423**	IN ...	**450**	BOUND	THRU	**621**	IN ...	**750**
	RIGHT	**0**	OUT ...	**730**		RIGHT	**0**	OUT ...	**630**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**544**	IN ...	**730**	BOUND	THRU	**568**	IN ...	**630**
	RIGHT	**0**	OUT ...	**450**		RIGHT	**0**	OUT ...	**750**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**423**	**450**	RATIO **7.5%**	BOUND	THRU	**621**	**750**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 15,700		RIGHT	**0**	**0**	ADT 15,700
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**544**	**730**	RATIO **7.5%**	BOUND	THRU	**568**	**630**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 15,700		RIGHT	**0**	**0**	ADT 15,700

Valle Vista Road (NS) at: Phelan Road (EW) - #8

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					14	2	9			
					<	v	>			
		19	^					^	11	
		324	>					<	400	
		16	v					v	11	
					<	^	>			
					5	1	18			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						25	31			
						v	^			
				419	<	IN	=	830	<	422
				359	>	OUT	=	830	>	351
						v	^			
						29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	0	2			
					<	v	>			
		0	^					^	3	
		63	>					<	116	
		2	v					v	0	
					<	^	>			
					2	0	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					22	2	11			
					<	v	>			
		19	^					^	14	
		387	>					<	516	
		18	v					v	11	
					<	^	>			
					7	1	18			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						53	**81**			
						v	^			
				793	<	IN	=	1721	<	**983**
				502	>	OUT	=	1720	>	**669**
						v	^			
						177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				13	<	IN	=	28	<	**14**
				12	>	OUT	=	28	>	**13**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						20	31			
						v	^			
				306	<	IN	=	663	<	378
				195	>	OUT	=	663	>	259
						v	^			
						68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						141	**129**			
						v	^			
				1412	<	IN	=	2632	<	**1678**
				586	>	OUT	=	2632	>	**735**
						v	^			
						356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						1	**1**			
						v	^			
				35	<	IN	=	60	<	**38**
				17	>	OUT	=	60	>	**20**
						v	^			
						4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						54	49			
						v	^			
				548	<	IN	=	1020	<	650
				228	>	OUT	=	1020	>	286
						v	^			
						137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						34	19			
						v	^			
				243	<			<	272	
				34	>			>	27	
						v	^			
						69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	20			
						v	^			
				240	<	IN	=	360	<	270
				40	>	OUT	=	370	>	40
						v	^			
						70	20			

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

						10	10			
						v	^			
				90	<			<	100	
				10	>			>	10	
						v	^			
						30	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					16	0	10			
					<	v	>			
		26	^					^	15	
		529	>					<	488	
		12	v					v	18	
					<	^	>			
					6	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						26	41			
						v	^			
				510	<	IN	=	1129	<	521
				567	>	OUT	=	1129	>	548
						v	^			
						30	15			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					2	0	7			
					<	v	>			
		8	^					^	3	
		46	>					<	52	
		0	v					v	0	
					<	^	>			
					5	0	2			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					18	0	17			
					<	v	>			
		34	^					^	18	
		575	>					<	540	
		12	v					v	18	
					<	^	>			
					11	0	11			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						125	**83**			
						v	^			
				945	<	IN	=	2793	<	**1206**
				1212	>	OUT	=	2793	>	**1471**
						v	^			
						294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						0	**0**			
						v	^			
				18	<	IN	=	43	<	**20**
				21	>	OUT	=	44	>	**24**
						v	^			
						2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						35	23			
						v	^			
				269	<	IN	=	793	<	343
				345	>	OUT	=	793	>	418
						v	^			
						83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						232	**246**			
						v	^			
				1204	<	IN	=	4038	<	**1441**
				1782	>	OUT	=	4038	>	**2154**
						v	^			
						434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						2	**2**			
						v	^			
				42	<	IN	=	97	<	**46**
				43	>	OUT	=	98	>	**48**
						v	^			
						6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						65	69			
						v	^			
				348	<	IN	=	1155	<	415
				510	>	OUT	=	1155	>	615
						v	^			
						123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						30	46			
						v	^			
				79	<			<	72	
				165	>			>	197	
						v	^			
						40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						30	50			
						v	^			
				80	<	IN	=	360	<	70
				170	>	OUT	=	370	>	200
						v	^			
						40	90			

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

						10	20			
						v	^			
				30	<			<	30	
				60	>			>	70	
						v	^			
						10	30			

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**40**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**18**	OUT ...	**60**		RIGHT	**11**	OUT ...	**40**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**22**	OUT ...	**40**		RIGHT	**18**	OUT ...	**70**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**430**	BOUND	THRU	**575**	IN ...	**680**
	RIGHT	**18**	OUT ...	**640**		RIGHT	**12**	OUT ...	**600**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**650**	BOUND	THRU	**540**	IN ...	**610**
	RIGHT	**14**	OUT ...	**430**		RIGHT	**18**	OUT ...	**670**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**10**	NORTH LEG	NORTH	LEFT	**11**	**23**	NORTH LEG
BOUND	THRU	**1**	**2**	RATIO **6.9%**	BOUND	THRU	**0**	**0**	RATIO **9.2%**
	RIGHT	**18**	**29**	ADT 1,300		RIGHT	**11**	**26**	ADT 1,300
SOUTH	LEFT	**11**	**17**	SOUTH LEG	SOUTH	LEFT	**17**	**26**	SOUTH LEG
BOUND	THRU	**2**	**5**	RATIO **8.4%**	BOUND	THRU	**0**	**0**	RATIO **7.4%**
	RIGHT	**22**	**28**	ADT 1,200		RIGHT	**18**	**24**	ADT 1,200
EAST	LEFT	**19**	**19**	EAST LEG	EAST	LEFT	**34**	**45**	EAST LEG
BOUND	THRU	**387**	**395**	RATIO **7.4%**	BOUND	THRU	**575**	**618**	RATIO **8.7%**
	RIGHT	**18**	**30**	ADT 14,700		RIGHT	**12**	**15**	ADT 14,700
WEST	LEFT	**11**	**25**	WEST LEG	WEST	LEFT	**18**	**25**	WEST LEG
BOUND	THRU	**516**	**602**	RATIO **7.4%**	BOUND	THRU	**540**	**553**	RATIO **8.8%**
	RIGHT	**14**	**19**	ADT 14,600		RIGHT	**18**	**25**	ADT 14,600

Valle Vista Road (NS) at: Phelan Road (EW) - #8

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**7**	SOUTH LEG		NORTH	LEFT	**11**	SOUTH LEG	
BOUND	THRU	**1**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**90**
	RIGHT	**18**	OUT ...	**80**		RIGHT	**11**	OUT ...	**60**
SOUTH	LEFT	**11**	NORTH LEG		SOUTH	LEFT	**17**	NORTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**60**
	RIGHT	**22**	OUT ...	**50**		RIGHT	**18**	OUT ...	**90**
EAST	LEFT	**19**	WEST LEG		EAST	LEFT	**34**	WEST LEG	
BOUND	THRU	**387**	IN ...	**450**	BOUND	THRU	**575**	IN ...	**750**
	RIGHT	**18**	OUT ...	**740**		RIGHT	**12**	OUT ...	**630**
WEST	LEFT	**11**	EAST LEG		WEST	LEFT	**18**	EAST LEG	
BOUND	THRU	**516**	IN ...	**750**	BOUND	THRU	**540**	IN ...	**630**
	RIGHT	**14**	OUT ...	**450**		RIGHT	**18**	OUT ...	**760**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**7**	**12**	NORTH LEG	NORTH	LEFT	**11**	**41**	NORTH LEG
BOUND	THRU	**1**	**2**	RATIO **6.9%**	BOUND	THRU	**0**	**0**	RATIO **9.4%**
	RIGHT	**18**	**36**	ADT 1,600		RIGHT	**11**	**50**	ADT 1,600
SOUTH	LEFT	**11**	**19**	SOUTH LEG	SOUTH	LEFT	**17**	**32**	SOUTH LEG
BOUND	THRU	**2**	**7**	RATIO **7.3%**	BOUND	THRU	**0**	**0**	RATIO **8.4%**
	RIGHT	**22**	**34**	ADT 1,800		RIGHT	**18**	**28**	ADT 1,800
EAST	LEFT	**19**	**23**	EAST LEG	EAST	LEFT	**34**	**58**	EAST LEG
BOUND	THRU	**387**	**395**	RATIO **7.6%**	BOUND	THRU	**575**	**678**	RATIO **8.7%**
	RIGHT	**18**	**38**	ADT 15,900		RIGHT	**12**	**23**	ADT 15,900
WEST	LEFT	**11**	**35**	WEST LEG	WEST	LEFT	**18**	**37**	WEST LEG
BOUND	THRU	**516**	**693**	RATIO **7.6%**	BOUND	THRU	**540**	**561**	RATIO **8.8%**
	RIGHT	**14**	**25**	ADT 15,700		RIGHT	**18**	**32**	ADT 15,700

Valle Vista Road (NS) at: Project Drive (EW) - #9

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	24			
				v	^			
		0	<	IN =	53	<		0
		0	>	OUT =	53	>		0
				v	^			
				29	24			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	2	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	2	0			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	31	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	26	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				177	**183**			
				v	^			
			<	IN =	360	<		
			>	OUT =	360	>		
				v	^			
				177	**183**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

				68	70			
				v	^			
		0	<	IN =	138	<		0
		0	>	OUT =	138	>		0
				v	^			
				68	70			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				356	**227**			
				v	^			
			<	IN =	583	<		
			>	OUT =	583	>		
				v	^			
				356	**227**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				4	**4**			
				v	^			
			<	IN =	8	<		
			>	OUT =	8	>		
				v	^			
				4	**4**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				137	88			
				v	^			
		0	<	IN =	224	<		0
		0	>	OUT =	224	>		0
				v	^			
				137	88			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

				69	17			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				69	17			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				70	20			
				v	^			
		0	<	IN =	90	<		0
		0	>	OUT =	90	>		0
				v	^			
				70	20			

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

				30	10			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				30	10			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	19	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				29	19			
				v	^			
		0	<	IN =	48	<		0
		0	>	OUT =	48	>		0
				v	^			
				29	19			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	5	0			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	29	0			
			<	v	>			
0	^						^	0
0	>						<	0
0	v						v	0
			<	^	>			
			0	24	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				294	**250**			
				v	^			
			<	IN =	544	<		
			>	OUT =	544	>		
				v	^			
				294	**250**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				2	**2**			
				v	^			
			<	IN =	4	<		
			>	OUT =	4	>		
				v	^			
				2	**2**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

				83	71			
				v	^			
		0	<	IN =	153	<		0
		0	>	OUT =	153	>		0
				v	^			
				83	71			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				434	**583**			
				v	^			
			<	IN =	1017	<		
			>	OUT =	1017	>		
				v	^			
				434	**583**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				6	**6**			
				v	^			
			<	IN =	12	<		
			>	OUT =	12	>		
				v	^			
				6	**6**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				123	165			
				v	^			
		0	<	IN =	288	<		0
		0	>	OUT =	288	>		0
				v	^			
				123	165			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

				40	94			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				40	94			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

				40	90			
				v	^			
		0	<	IN =	130	<		0
		0	>	OUT =	130	>		0
				v	^			
				40	90			

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

				10	30			
				v	^			
		0	<			<		0
		0	>			>		0
				v	^			
				10	30			

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**50**
	RIGHT	**0**	OUT ...	**60**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**60**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**50**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **8.3%**	BOUND	THRU	**24**	**50**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**60**	RATIO **8.3%**	BOUND	THRU	**29**	**40**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #9

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**50**	BOUND	THRU	**24**	IN ...	**90**
	RIGHT	**0**	OUT ...	**80**		RIGHT	**0**	OUT ...	**60**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**80**	BOUND	THRU	**29**	IN ...	**60**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**90**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**50**	RATIO **7.2%**	BOUND	THRU	**24**	**90**	RATIO **8.3%**
	RIGHT	**0**	**0**	ADT 1,800		RIGHT	**0**	**0**	ADT 1,800
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**80**	RATIO **7.2%**	BOUND	THRU	**29**	**60**	RATIO **8.3%**
	RIGHT	**0**	**0**	ADT 1,800		RIGHT	**0**	**0**	ADT 1,800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #10

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	24				
					v	^				
		0	<	IN =		53	<	0		
		0	>	OUT =		53	>	0		
					v	^				
					29	24				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	2	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	2	0				

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	31	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	26	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					177	**183**				
					v	^				
			<	IN =		360	<			
			>	OUT =		360	>			
					v	^				
					177	**183**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					68	70				
					v	^				
		0	<	IN =		138	<	0		
		0	>	OUT =		138	>	0		
					v	^				
					68	70				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					356	**227**				
					v	^				
			<	IN =		583	<			
			>	OUT =		583	>			
					v	^				
					356	**227**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					4	**4**				
					v	^				
			<	IN =		8	<			
			>	OUT =		8	>			
					v	^				
					4	**4**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					137	88				
					v	^				
		0	<	IN =		224	<	0		
		0	>	OUT =		224	>	0		
					v	^				
					137	88				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					69	17				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					69	17				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					70	20				
					v	^				
		0	<	IN =		90	<	0		
		0	>	OUT =		90	>	0		
					v	^				
					70	20				

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

					30	10				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					30	10				

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	19	0				

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					29	19				
					v	^				
		0	<	IN =		48	<	0		
		0	>	OUT =		48	>	0		
					v	^				
					29	19				

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	5	0				

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	29	0				
				<	v	>				
		0	^					^	0	
		0	>					<	0	
		0	v					v	0	
				<	^	>				
				0	24	0				

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					294	**250**				
					v	^				
			<	IN =		544	<			
			>	OUT =		544	>			
					v	^				
					294	**250**				

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					2	**2**				
					v	^				
			<	IN =		4	<			
			>	OUT =		4	>			
					v	^				
					2	**2**				

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					83	71				
					v	^				
		0	<	IN =		153	<	0		
		0	>	OUT =		153	>	0		
					v	^				
					83	71				

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					434	**583**				
					v	^				
			<	IN =		1017	<			
			>	OUT =		1017	>			
					v	^				
					434	**583**				

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					6	**6**				
					v	^				
			<	IN =		12	<			
			>	OUT =		12	>			
					v	^				
					6	**6**				

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					123	165				
					v	^				
		0	<	IN =		288	<	0		
		0	>	OUT =		288	>	0		
					v	^				
					123	165				

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					40	94				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					40	94				

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					40	90				
					v	^				
		0	<	IN =		130	<	0		
		0	>	OUT =		130	>	0		
					v	^				
					40	90				

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

					10	30				
					v	^				
		0	<				<	0		
		0	>				>	0		
					v	^				
					10	30				

Valle Vista Road (NS) at: Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**40**	BOUND	THRU	**24**	IN ...	**50**
	RIGHT	**0**	OUT ...	**60**		RIGHT	**0**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**60**	BOUND	THRU	**29**	IN ...	**40**
	RIGHT	**0**	OUT ...	**40**		RIGHT	**0**	OUT ...	**50**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**40**	RATIO **8.3%**	BOUND	THRU	**24**	**50**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**60**	RATIO **8.3%**	BOUND	THRU	**29**	**40**	RATIO **7.5%**
	RIGHT	**0**	**0**	ADT 1,200		RIGHT	**0**	**0**	ADT 1,200
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Valle Vista Road (NS) at: Project Drive (EW) - #10

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**26**	IN ...	**50**	BOUND	THRU	**24**	IN ...	**90**
	RIGHT	**0**	OUT ...	**80**		RIGHT	**0**	OUT ...	**60**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**31**	IN ...	**80**	BOUND	THRU	**29**	IN ...	**60**
	RIGHT	**0**	OUT ...	**50**		RIGHT	**0**	OUT ...	**90**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**0**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**26**	**50**	RATIO **7.2%**	BOUND	THRU	**24**	**90**	RATIO **8.3%**
	RIGHT	**0**	**0**	ADT 1,800		RIGHT	**0**	**0**	ADT 1,800
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**31**	**80**	RATIO **7.2%**	BOUND	THRU	**29**	**60**	RATIO **8.3%**
	RIGHT	**0**	**0**	ADT 1,800		RIGHT	**0**	**0**	ADT 1,800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**0**	**0**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO -	BOUND	THRU	**0**	**0**	RATIO -
	RIGHT	**0**	**0**	ADT 0		RIGHT	**0**	**0**	ADT 0

Johnson Road (NS) at: Phelan Road (EW) - #11

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					77	32	58			
					<	v	>			
			24	^				^	30	
			285	>				<	346	
			6	v				v	93	
					<	^	>			
					9	13	169			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						167	67			
						v	^			
			432	<	IN	=	1142	<	469	
			315	>	OUT	=	1142	>	512	
						v	^			
						131	191			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					8	6	2			
					<	v	>			
			12	^				^	2	
			59	>				<	75	
			2	v				v	15	
					<	^	>			
					0	2	21			

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					85	38	60			
					<	v	>			
			36	^				^	32	
			344	>				<	421	
			8	v				v	108	
					<	^	>			
					9	15	190			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						178	**91**			
						v	^			
			983	<	IN	=	1844	<	**997**	
			669	>	OUT	=	1845	>	**771**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						1	**1**			
						v	^			
			14	<	IN	=	28	<	**14**	
			13	>	OUT	=	29	>	**14**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

						68	35			
						v	^			
			378	<	IN	=	710	<	384	
			259	>	OUT	=	711	>	298	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						419	**171**			
						v	^			
			1678	<	IN	=	2562	<	**1408**	
			735	>	OUT	=	2562	>	**713**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						9	**4**			
						v	^			
			38	<	IN	=	60	<	**31**	
			20	>	OUT	=	59	>	**17**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

						162	66			
						v	^			
			650	<	IN	=	994	<	545	
			286	>	OUT	=	993	>	277	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

						94	31			
						v	^			
			272	<				<	162	
			27	>				>	-21	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						90	30			
						v	^			
			270	<	IN	=	290	<	160	
			40	>	OUT	=	360	>	60	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO **2018**

4 YEARS

						10	0			
						v	^			
			40	<				<	20	
			10	>				>	10	
						v	^			
						0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

					43	30	39			
					<	v	>			
			86	^				^	45	
			432	>				<	395	
			12	v				v	79	
					<	^	>			
					15	40	178			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

						112	171			
						v	^			
			453	<	IN	=	1394	<	519	
			530	>	OUT	=	1394	>	649	
						v	^			
						121	233			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

					3	0	19			
					<	v	>			
			12	^				^	14	
			53	>				<	50	
			0	v				v	5	
					<	^	>			
					3	10	15			

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

					46	30	58			
					<	v	>			
			98	^				^	59	
			485	>				<	445	
			12	v				v	84	
					<	^	>			
					18	50	193			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

						184	**232**			
						v	^			
			1206	<	IN	=	2988	<	**1333**	
			1471	>	OUT	=	2989	>	**1551**	
						v	^			
						0	**0**			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

						2	**2**			
						v	^			
			20	<	IN	=	47	<	**21**	
			24	>	OUT	=	47	>	**25**	
						v	^			
						0	**0**			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

						52	65			
						v	^			
			343	<	IN	=	848	<	378	
			418	>	OUT	=	849	>	441	
						v	^			
						0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

						334	**618**			
						v	^			
			1441	<	IN	=	3818	<	**1330**	
			2154	>	OUT	=	3817	>	**1758**	
						v	^			
						0	**0**			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

						7	**8**			
						v	^			
			46	<	IN	=	96	<	**41**	
			48	>	OUT	=	95	>	**41**	
						v	^			
						0	**0**			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

						95	175			
						v	^			
			415	<	IN	=	1093	<	383	
			615	>	OUT	=	1093	>	502	
						v	^			
						0	0			

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

						43	110			
						v	^			
			72	<				<	4	
			197	>				>	62	
						v	^			
						0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

						40	110			
						v	^			
			70	<	IN	=	300	<	60	
			200	>	OUT	=	250	>	70	
						v	^			
						0	0			

FUTURE YEAR GROWTH: 2014 TO 2018

4 YEARS

						10	20			
						v	^			
			10	<				<	10	
			30	>				>	10	
						v	^			
						0	0			

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**190**	BOUND	THRU	**30**	IN ...	**140**
	RIGHT	**85**	OUT ...	**80**		RIGHT	**46**	OUT ...	**230**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**400**	BOUND	THRU	**485**	IN ...	**630**
	RIGHT	**8**	OUT ...	**560**		RIGHT	**12**	OUT ...	**520**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**580**	BOUND	THRU	**445**	IN ...	**600**
	RIGHT	**32**	OUT ...	**600**		RIGHT	**59**	OUT ...	**750**

OPENING YEAR (2018) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**10**	NORTH LEG	NORTH	LEFT	**18**	**18**	NORTH LEG
BOUND	THRU	**15**	**15**	RATIO **6.3%**	BOUND	THRU	**50**	**54**	RATIO **8.4%**
	RIGHT	**190**	**190**	ADT 4,400		RIGHT	**193**	**195**	ADT 4,400
SOUTH	LEFT	**60**	**60**	SOUTH LEG	SOUTH	LEFT	**58**	**59**	SOUTH LEG
BOUND	THRU	**38**	**38**	RATIO **7.9%**	BOUND	THRU	**30**	**32**	RATIO **8.4%**
	RIGHT	**85**	**96**	ADT 4,700		RIGHT	**46**	**49**	ADT 4,700
EAST	LEFT	**36**	**37**	EAST LEG	EAST	LEFT	**98**	**113**	EAST LEG
BOUND	THRU	**344**	**356**	RATIO **7.5%**	BOUND	THRU	**485**	**504**	RATIO **8.5%**
	RIGHT	**8**	**8**	ADT 15,900		RIGHT	**12**	**13**	ADT 15,900
WEST	LEFT	**108**	**108**	WEST LEG	WEST	LEFT	**84**	**85**	WEST LEG
BOUND	THRU	**421**	**454**	RATIO **7.0%**	BOUND	THRU	**445**	**452**	RATIO **8.3%**
	RIGHT	**32**	**32**	ADT 13,800		RIGHT	**59**	**63**	ADT 13,800

Johnson Road (NS) at: Phelan Road (EW) - #11

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**9**	SOUTH LEG		NORTH	LEFT	**18**	SOUTH LEG	
BOUND	THRU	**15**	IN ...	**210**	BOUND	THRU	**50**	IN ...	**260**
	RIGHT	**190**	OUT ...	**150**		RIGHT	**193**	OUT ...	**130**
SOUTH	LEFT	**60**	NORTH LEG		SOUTH	LEFT	**58**	NORTH LEG	
BOUND	THRU	**38**	IN ...	**250**	BOUND	THRU	**30**	IN ...	**160**
	RIGHT	**85**	OUT ...	**100**		RIGHT	**46**	OUT ...	**300**
EAST	LEFT	**36**	WEST LEG		EAST	LEFT	**98**	WEST LEG	
BOUND	THRU	**344**	IN ...	**420**	BOUND	THRU	**485**	IN ...	**760**
	RIGHT	**8**	OUT ...	**730**		RIGHT	**12**	OUT ...	**560**
WEST	LEFT	**108**	EAST LEG		WEST	LEFT	**84**	EAST LEG	
BOUND	THRU	**421**	IN ...	**680**	BOUND	THRU	**445**	IN ...	**640**
	RIGHT	**32**	OUT ...	**640**		RIGHT	**59**	OUT ...	**790**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**9**	**12**	NORTH LEG	NORTH	LEFT	**18**	**20**	NORTH LEG
BOUND	THRU	**15**	**17**	RATIO **7.2%**	BOUND	THRU	**50**	**64**	RATIO **9.1%**
	RIGHT	**190**	**209**	ADT 5,000		RIGHT	**193**	**213**	ADT 5,000
SOUTH	LEFT	**60**	**74**	SOUTH LEG	SOUTH	LEFT	**58**	**60**	SOUTH LEG
BOUND	THRU	**38**	**43**	RATIO **8.2%**	BOUND	THRU	**30**	**35**	RATIO **8.8%**
	RIGHT	**85**	**144**	ADT 5,000		RIGHT	**46**	**62**	ADT 5,000
EAST	LEFT	**36**	**46**	EAST LEG	EAST	LEFT	**98**	**165**	EAST LEG
BOUND	THRU	**344**	**379**	RATIO **8.3%**	BOUND	THRU	**485**	**561**	RATIO **8.8%**
	RIGHT	**8**	**8**	ADT 16,700		RIGHT	**12**	**16**	ADT 16,700
WEST	LEFT	**108**	**119**	WEST LEG	WEST	LEFT	**84**	**93**	WEST LEG
BOUND	THRU	**421**	**574**	RATIO **7.8%**	BOUND	THRU	**445**	**478**	RATIO **8.7%**
	RIGHT	**32**	**37**	ADT 15,000		RIGHT	**59**	**71**	ADT 15,000

Eaby Road (NS) at: Phelan Road (EW) - #12

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	1	6		
				<	v	>		
		4	^			^		5
		509	>			<		483
		16	v			v		15
				<	^	>		
				25	2	29		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					13	11		
					v	^		
		514	<	IN =	1101	<		503
		529	>	OUT =	1101	>		544
					v	^		
					32	56		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	0	0		
				<	v	>		
		0	^			^		3
		82	>			<		89
		4	v			v		2
				<	^	>		
				0	0	4		

PCE FACTORS BY AXLE:

2: **1.5** 3: **2.0** 4+: **3.0**

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				6	1	6		
				<	v	>		
		4	^			^		8
		591	>			<		572
		20	v			v		17
				<	^	>		
				25	2	33		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		997	<	IN =	1768	<		**997**
		771	>	OUT =	1768	>		**771**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		14	<	IN =	28	<		**14**
		14	>	OUT =	28	>		**14**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.38**

PHF FOR TRUCKS: **0.333**

					0	0		
					v	^		
		384	<	IN =	681	<		384
		298	>	OUT =	681	>		298
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1408	<	IN =	2121	<		**1408**
		713	>	OUT =	2121	>		**713**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		31	<	IN =	48	<		**31**
		17	>	OUT =	48	>		**17**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					0	0		
					v	^		
		545	<	IN =	822	<		545
		277	>	OUT =	822	>		277
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: **2035**

FACTOR = **1.00**

					0	0		
					v	^		
		162	<			<		162
		-21	>			>		-21
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		160	<	IN =	220	<		160
		60	>	OUT =	220	>		60
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2014 TO **2024**

10 YEARS

					0	0		
					v	^		
		60	<			<		60
		20	>			>		20
					v	^		
					0	0		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				6	0	5		
				<	v	>		
		10	^			^		4
		589	>			<		537
		50	v			v		33
				<	^	>		
				26	0	15		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					11	14		
					v	^		
		569	<	IN =	1275	<		574
		649	>	OUT =	1275	>		609
					v	^		
					83	41		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	2	0		
				<	v	>		
		0	^			^		2
		84	>			<		35
		2	v			v		5
				<	^	>		
				2	0	3		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				8	2	5		
				<	v	>		
		10	^			^		6
		673	>			<		572
		52	v			v		38
				<	^	>		
				28	0	18		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					0	**0**		
					v	^		
		1333	<	IN =	2884	<		**1333**
		1551	>	OUT =	2884	>		**1551**
					v	^		
					0	**0**		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					0	**0**		
					v	^		
		21	<	IN =	46	<		**21**
		25	>	OUT =	46	>		**25**
					v	^		
					0	**0**		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: **0.28**

PHF FOR TRUCKS: **0.25**

					0	0		
					v	^		
		378	<	IN =	819	<		378
		441	>	OUT =	819	>		441
					v	^		
					0	0		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					0	**0**		
					v	^		
		1330	<	IN =	3088	<		**1330**
		1758	>	OUT =	3088	>		**1758**
					v	^		
					0	**0**		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					0	**0**		
					v	^		
		41	<	IN =	82	<		**41**
		41	>	OUT =	82	>		**41**
					v	^		
					0	**0**		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					0	0		
					v	^		
		383	<	IN =	885	<		383
		502	>	OUT =	885	>		502
					v	^		
					0	0		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					0	0		
					v	^		
		4	<			<		4
		62	>			>		62
					v	^		
					0	0		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					0	0		
					v	^		
		60	<	IN =	130	<		60
		70	>	OUT =	130	>		70
					v	^		
					0	0		

FUTURE YEAR GROWTH: 2014 TO 2024

10 YEARS

					0	0		
					v	^		
		20	<			<		20
		30	>			>		30
					v	^		
					0	0		

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**640**	BOUND	THRU	**673**	IN ...	**770**
	RIGHT	**20**	OUT ...	**660**		RIGHT	**52**	OUT ...	**630**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**660**	BOUND	THRU	**572**	IN ...	**640**
	RIGHT	**8**	OUT ...	**650**		RIGHT	**6**	OUT ...	**730**

OPENING YEAR (2024) TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**25**	NORTH LEG	NORTH	LEFT	**28**	**30**	NORTH LEG
BOUND	THRU	**2**	**2**	RATIO **6.8%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**33**	**34**	ADT 400		RIGHT	**18**	**20**	ADT 400
SOUTH	LEFT	**6**	**6**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**1**	RATIO **5.9%**	BOUND	THRU	**2**	**2**	RATIO **8.5%**
	RIGHT	**6**	**6**	ADT 1,700		RIGHT	**8**	**11**	ADT 1,700
EAST	LEFT	**4**	**4**	EAST LEG	EAST	LEFT	**10**	**10**	EAST LEG
BOUND	THRU	**591**	**612**	RATIO **8.3%**	BOUND	THRU	**673**	**703**	RATIO **8.7%**
	RIGHT	**20**	**20**	ADT 15,800		RIGHT	**52**	**54**	ADT 15,800
WEST	LEFT	**17**	**19**	WEST LEG	WEST	LEFT	**38**	**39**	WEST LEG
BOUND	THRU	**572**	**630**	RATIO **8.1%**	BOUND	THRU	**572**	**590**	RATIO **8.7%**
	RIGHT	**8**	**8**	ADT 16,100		RIGHT	**6**	**8**	ADT 16,100

Eaby Road (NS) at: Phelan Road (EW) - #12

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

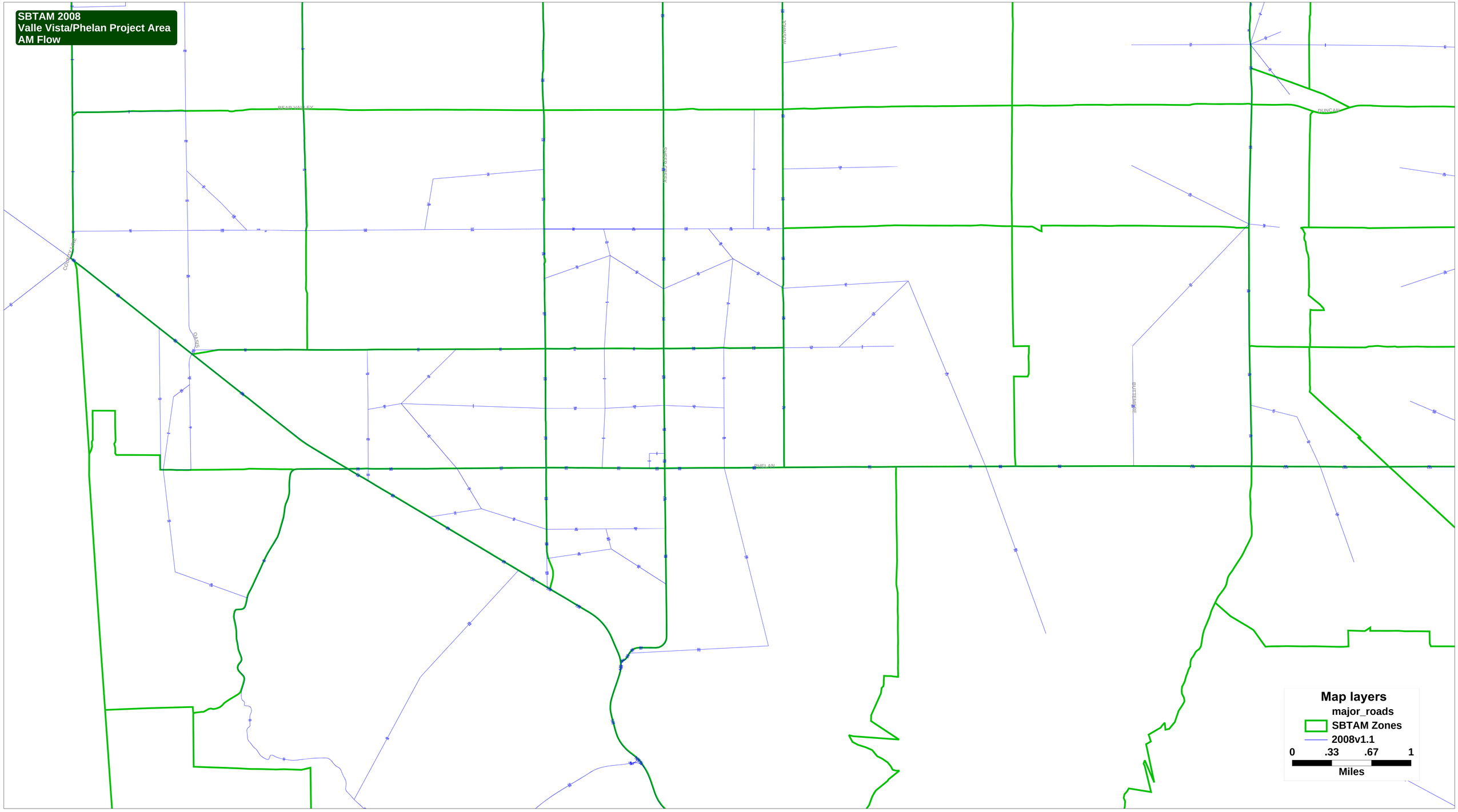
YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**25**	SOUTH LEG		NORTH	LEFT	**28**	SOUTH LEG	
BOUND	THRU	**2**	IN ...	**60**	BOUND	THRU	**0**	IN ...	**50**
	RIGHT	**33**	OUT ...	**40**		RIGHT	**18**	OUT ...	**90**
SOUTH	LEFT	**6**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**1**	IN ...	**10**	BOUND	THRU	**2**	IN ...	**20**
	RIGHT	**6**	OUT ...	**10**		RIGHT	**8**	OUT ...	**20**
EAST	LEFT	**4**	WEST LEG		EAST	LEFT	**10**	WEST LEG	
BOUND	THRU	**591**	IN ...	**670**	BOUND	THRU	**673**	IN ...	**790**
	RIGHT	**20**	OUT ...	**720**		RIGHT	**52**	OUT ...	**660**
WEST	LEFT	**17**	EAST LEG		WEST	LEFT	**38**	EAST LEG	
BOUND	THRU	**572**	IN ...	**720**	BOUND	THRU	**572**	IN ...	**670**
	RIGHT	**8**	OUT ...	**680**		RIGHT	**6**	OUT ...	**750**

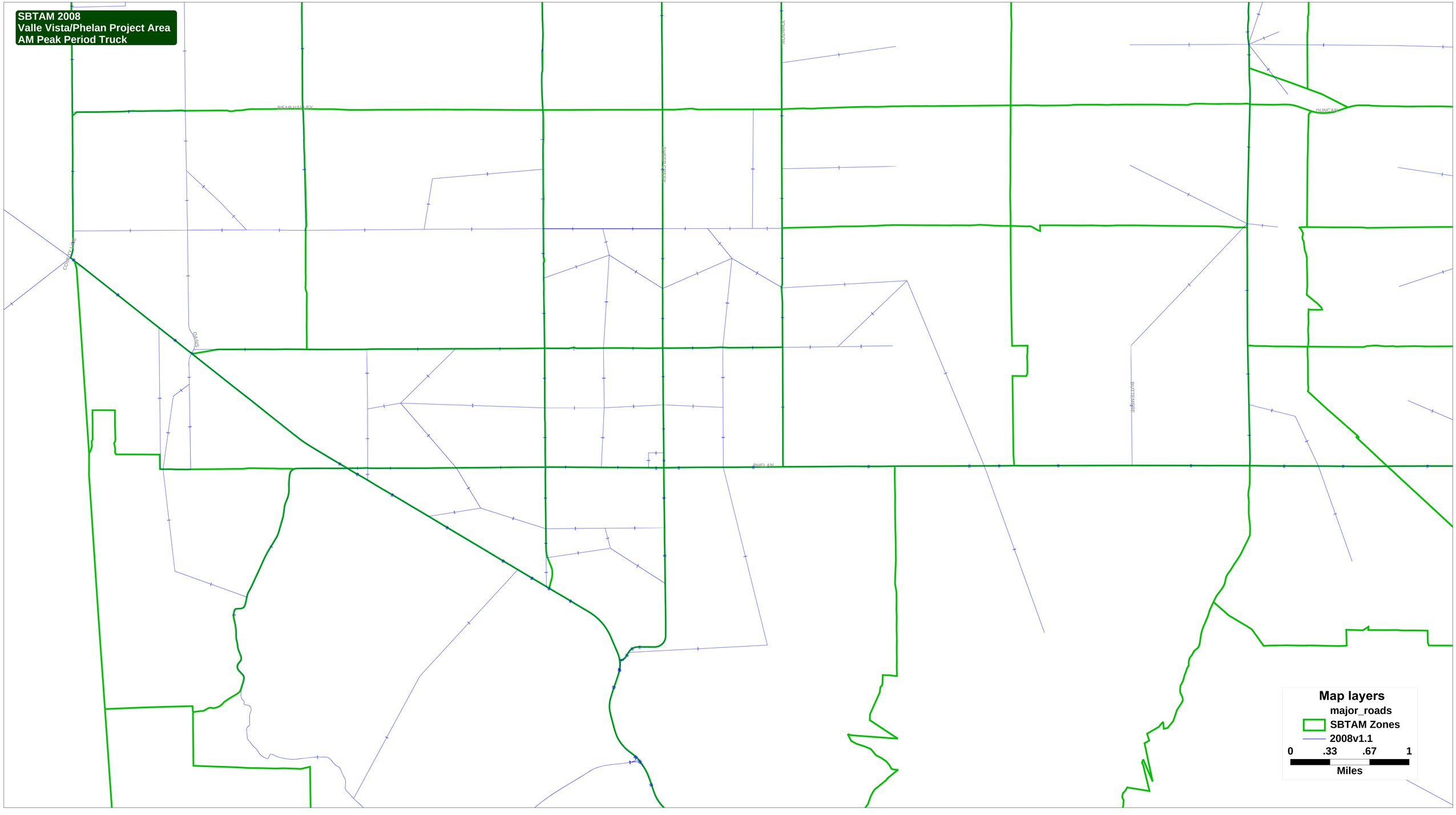
YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**25**	**31**	NORTH LEG	NORTH	LEFT	**28**	**31**	NORTH LEG
BOUND	THRU	**2**	**3**	RATIO **8.3%**	BOUND	THRU	**0**	**1**	RATIO **10.2%**
	RIGHT	**33**	**41**	ADT 400		RIGHT	**18**	**33**	ADT 400
SOUTH	LEFT	**6**	**7**	SOUTH LEG	SOUTH	LEFT	**5**	**7**	SOUTH LEG
BOUND	THRU	**1**	**2**	RATIO **6.5%**	BOUND	THRU	**2**	**2**	RATIO **9.3%**
	RIGHT	**6**	**7**	ADT 1,800		RIGHT	**8**	**11**	ADT 1,800
EAST	LEFT	**4**	**5**	EAST LEG	EAST	LEFT	**10**	**12**	EAST LEG
BOUND	THRU	**591**	**642**	RATIO **8.5%**	BOUND	THRU	**673**	**723**	RATIO **8.6%**
	RIGHT	**20**	**20**	ADT 16,600		RIGHT	**52**	**58**	ADT 16,600
WEST	LEFT	**17**	**19**	WEST LEG	WEST	LEFT	**38**	**42**	WEST LEG
BOUND	THRU	**572**	**690**	RATIO **8.3%**	BOUND	THRU	**572**	**619**	RATIO **8.6%**
	RIGHT	**8**	**9**	ADT 16,900		RIGHT	**6**	**8**	ADT 16,900

APPENDIX E

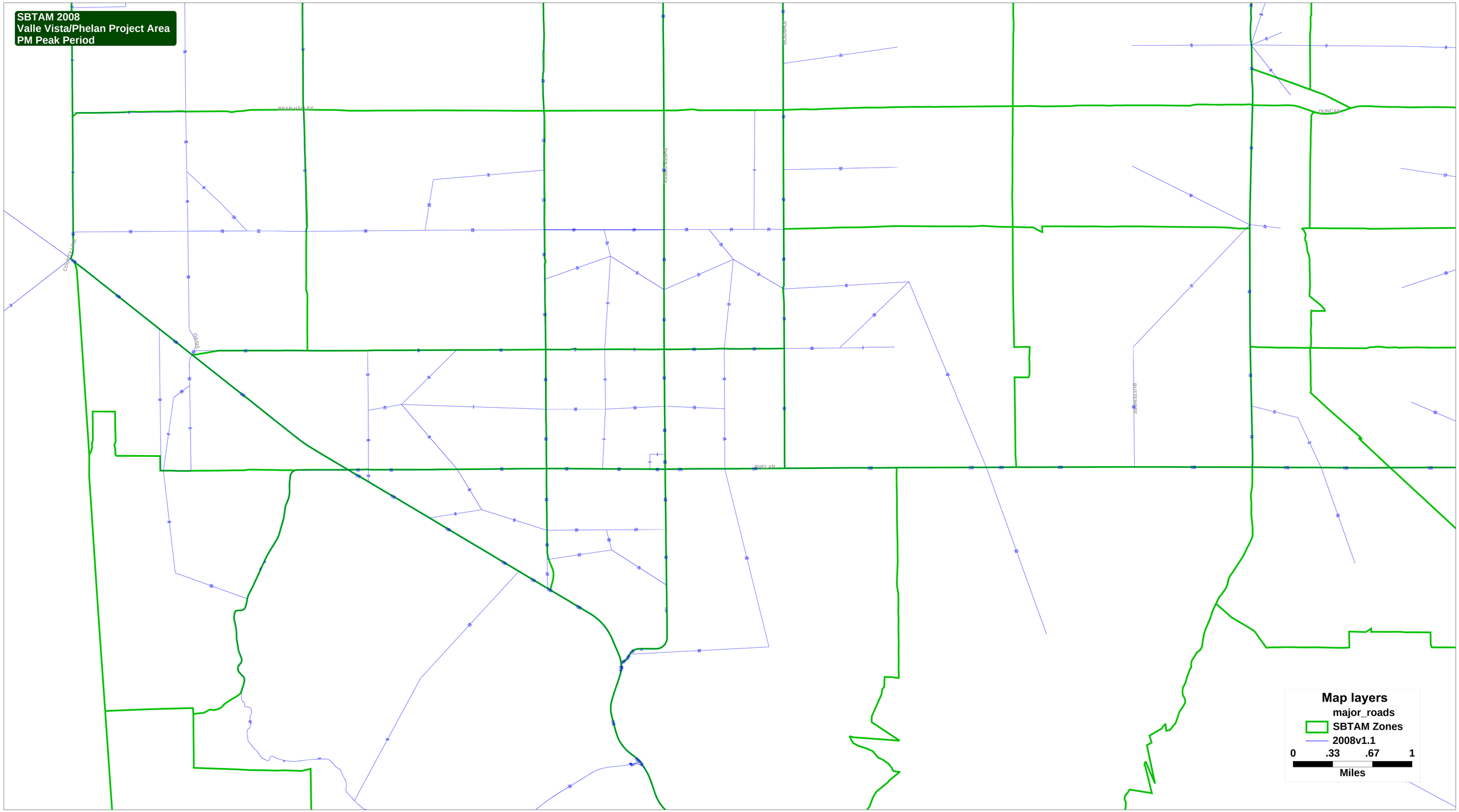
Traffic Model Plots

SBTAM 2008
Valle Vista/Phelan Project Area
AM Flow

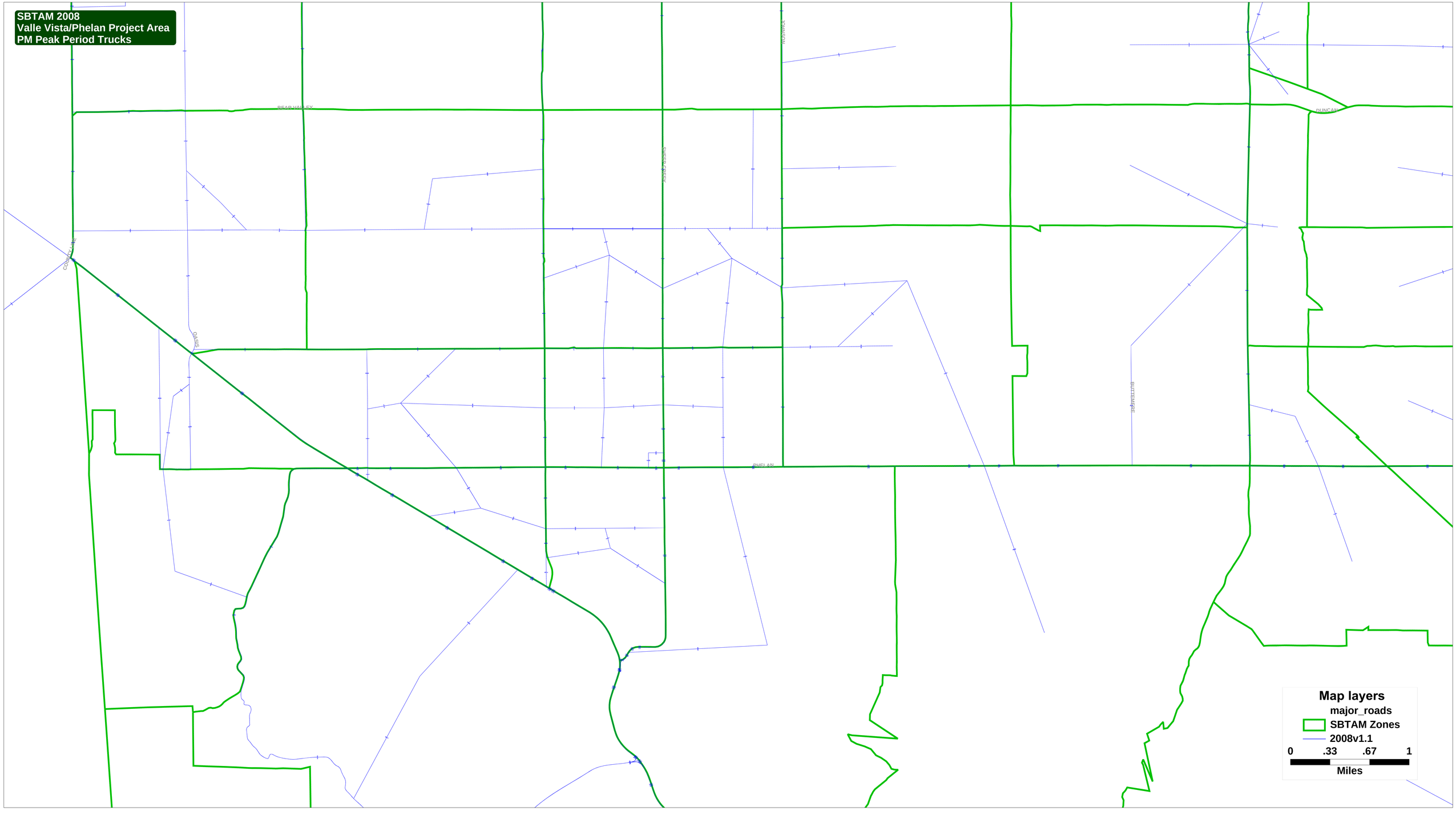



SBTAM 2008
Valle Vista/Phelan Project Area
AM Peak Period Truck
CONCRETE LINE
OASIS
PHELAN
BUTTERMILK
Map layers
major_roads
SBTAM Zones
2008v1.1
0
.33
.67
1
Miles

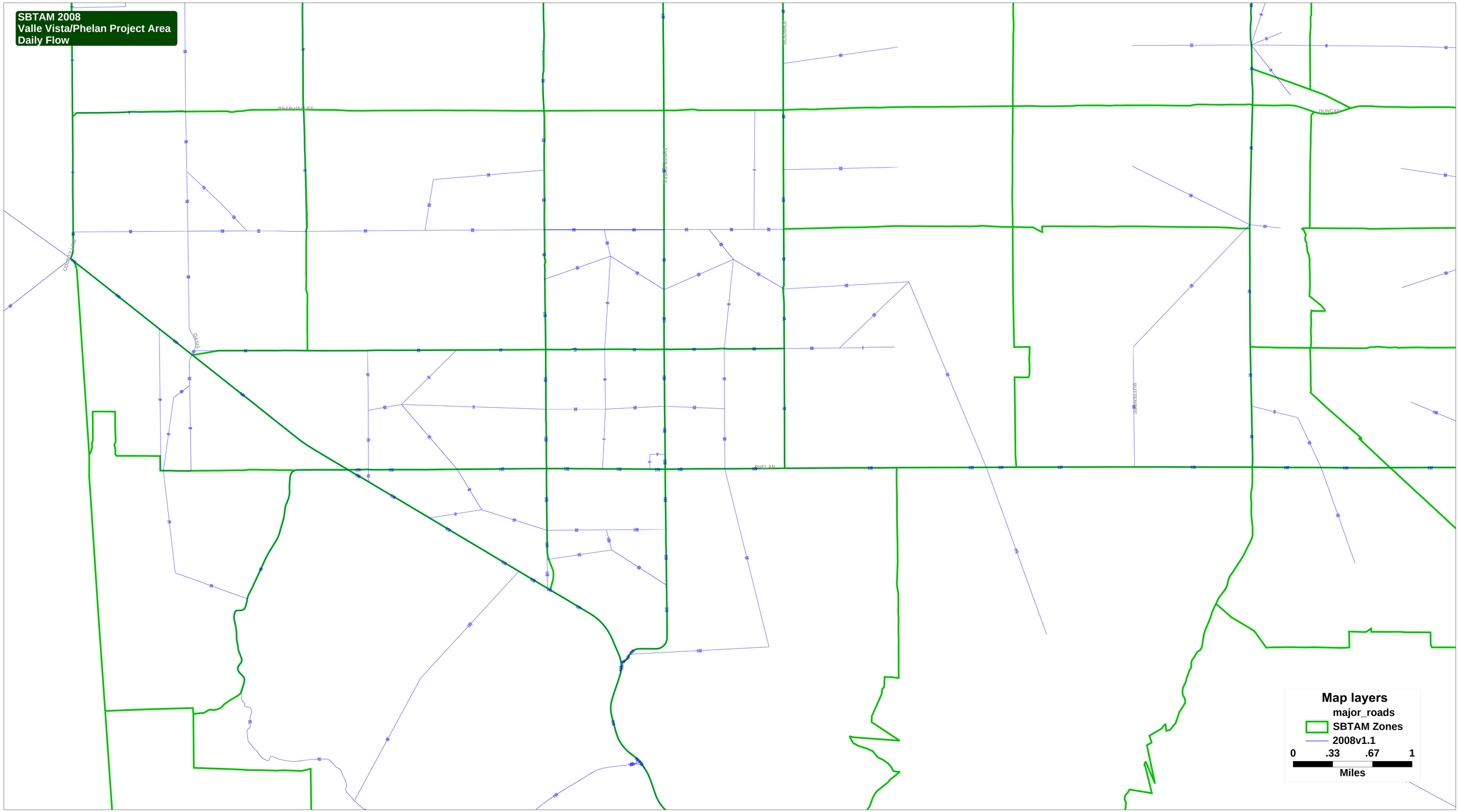
SBTAM 2008
Valle Vista/Phelan Project Area
PM Peak Period



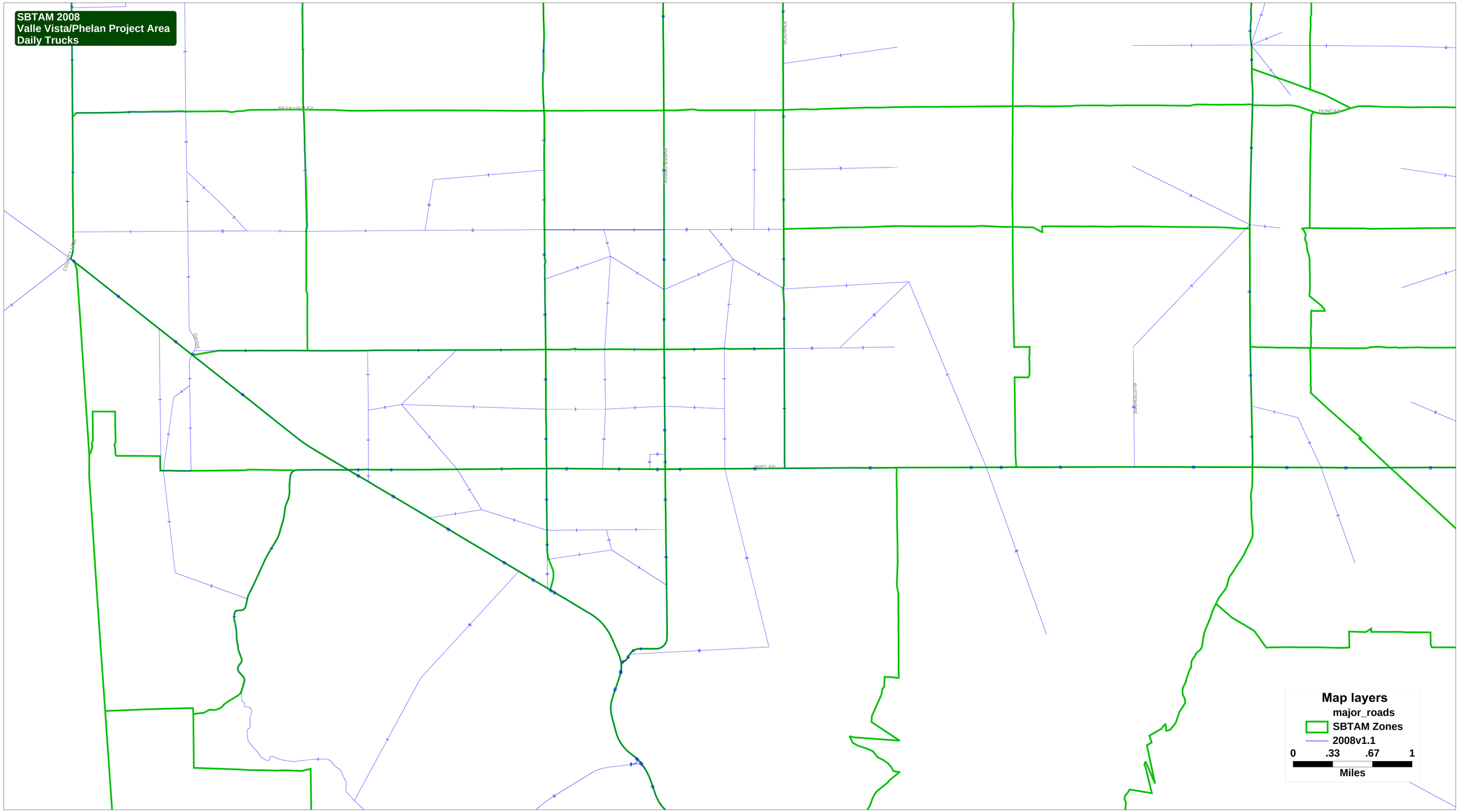
SBTAM 2008
Valle Vista/Phelan Project Area
PM Peak Period Trucks



SBTAM 2008
Valle Vista/Phelan Project Area
Daily Flow



SBTAM 2008
Valle Vista/Phelan Project Area
Daily Trucks



SBTAM 2035
Phelan Rd/Valle Vista Rd
With Project Land Use Changes
AM Flow

SBTAM 2035
Phelan Rd/Valle Vista Rd
With Project Land Use Changes
AM Flow - Truck

SBTAM 2035
Phelan Rd/Valle Vista Rd
With Project Land Use Changes
PM Flow

SBTAM 2035
Phelan Rd/Valle Vista Rd
With Project Land Use Changes
PM Flow - Truck

SBTAM 2035
Phelan Rd/Valle Vista Rd
With Project Land Use Changes
Daily Flow

SBTAM 2035
Phelan Rd/Valle Vista Rd
With Project Land Use Changes
Daily Flow - Truck

APPENDIX F

Explanation and Calculation of Intersection Delay

EXPLANATION AND CALCULATION OF INTERSECTION LEVEL OF SERVICE USING DELAY METHODOLOGY

The levels of service at the unsignalized and signalized intersections are calculated using the delay methodology in the Highway Capacity Manual. This methodology views an intersection as consisting of several lane groups. A lane group is a set of lanes serving a movement. If there are two northbound left turn lanes, then the lane group serving the northbound left turn movement has two lanes. Similarly, there may be three lanes in the lane group serving the northbound through movement, one lane in the lane group serving the northbound right turn movement, and so forth. It is also possible for one lane to serve two lane groups. A shared lane might result in there being 1.5 lanes in the northbound left turn lane group and 2.5 lanes in the northbound through lane group.

For each lane group, there is a capacity. That capacity is calculated by multiplying the number of lanes in the lane group times a theoretical maximum lane capacity per lane time's 12 adjustment factors.

Each of the 12 adjustment factors has a value of approximately 1.00. A value less than 1.00 is generally assigned when a less than desirable condition occurs.

The 12 adjustment factors are as follows:

1. Peak hour factor (to account for peaking within the peak hour)
2. Lane utilization factor (to account for not all lanes loading equally)
3. Lane width
4. Percent of heavy trucks
5. Approach grade
6. Parking
7. Bus stops at intersections
8. Area type (CBD or other)
9. Right turns
10. Left turns

11. Pedestrian activity

12. Signal progression

The maximum theoretical lane capacity and the 12 adjustment factors for it are all unknowns for which approximate estimates have been recommended in the Highway Capacity Manual. For the most part, the recommended values are not based on statistical analysis but rather on educated estimates. However, it is possible to use the delay method and get reasonable results as will be discussed below.

Once the lane group volume is known and the lane group capacity is known, a volume to capacity ratio can be calculated for the lane group.

With a volume to capacity ratio calculated, average delay per vehicle in a lane group can be estimated. The average delay per vehicle in a lane group is calculated using a complex formula provided by the Highway Capacity Manual, which can be simplified and described as follows:

Delay per vehicle in a lane group is a function of the following:

1. Cycle length

2. Amount of red time faced by a lane group

3. Amount of yellow time for that lane group

4. The volume to capacity ratio of the lane group

The average delay per vehicle for each lane group is calculated, and eventually an overall average delay for all vehicles entering the intersection is calculated. This average delay per vehicle is then used to judge Level of Service. The Level of Services are defined in the table that follows this discussion.

Experience has shown that when a maximum lane capacity of 1,900 vehicles per hour is used (as recommended in the Highway Capacity Manual), little or no yellow time penalty is used, and none of the 12 penalty factors are applied, calculated delay is realistic. The delay calculation for instance assumes that yellow time is totally unused. Yet experience shows that most of the yellow time is used.

An idiosyncrasy of the delay methodology is that it is possible to add traffic to an intersection and reduce the average total delay per vehicle. If the average total delay is 30 seconds per vehicle for all vehicles traveling through an intersection, and traffic is added to a movement that has an average total delay of 15 seconds per vehicle, then the overall average total delay is reduced.

The delay calculation for a lane group is based on a concept that the delay is a function of the amount of unused capacity available. As the volume approaches capacity and there is no more unused capacity available, then the delay rapidly increases. Delay is not proportional to volume, but rather increases rapidly as the unused capacity approaches zero.

Because delay is not linearly related to volumes, the delay does not reflect how close an intersection is to overloading. If an intersection is operating at Level of Service C and has an average total delay of 18 seconds per vehicle, you know very little as to what percent the traffic can increase before Level of Service E is reached.

LEVEL OF SERVICE DESCRIPTION[1]

Level Of Service	Description	Average Total Delay Per Vehicle (Seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

[1] Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 2000.

Existing

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.392
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	11.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	16	3	65	5	12	0	3	277	30	202	202	7
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	16	3	65	5	12	0	3	277	30	202	202	7
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88	
PHF Volume:	18	3	74	6	14	0	3	317	34	231	231	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	3	74	6	14	0	3	317	34	231	231	8
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	18	3	74	6	14	0	3	317	34	231	231	8
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800	1800		1800 1800	1800		1800 1800	1800	
Adjustment:	0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00	
Lanes:	0.85 0.15	1.00		0.31 0.69	1.00		1.00 1.00	1.00		1.00 0.97	0.03	
Final Sat.:	1444 271	1800		520 1249	1800		1700 1800	1800		1700 1740	60	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.01	0.04		0.01 0.01	0.00		0.00 0.18	0.02		0.14 0.13	0.13	
Crit Moves:		****						****		****		
Green/Cycle:	0.11 0.11	0.11		0.11 0.11	0.00		0.01 0.45	0.45		0.35 0.78	0.78	
Volume/Cap:	0.12 0.12	0.39		0.10 0.10	0.00		0.17 0.39	0.04		0.39 0.17	0.17	
Delay/Veh:	24.6 24.6	26.4		24.5 24.5	0.0		33.3 11.4	9.3		15.3 1.7	1.7	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	24.6 24.6	26.4		24.5 24.5	0.0		33.3 11.4	9.3		15.3 1.7	1.7	
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	0	0	2	0	0	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	10.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	14	5	37	7	3	1	2	264	21	240	279	14
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	14	5	37	7	3	1	2	264	21	240	279	14
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.82 0.82	0.82		0.82 0.82	0.82		0.82 0.82	0.82		0.82 0.82	0.82	
PHF Volume:	17	6	45	9	4	1	2	323	26	294	341	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	6	45	9	4	1	2	323	26	294	341	17
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	17	6	45	9	4	1	2	323	26	294	341	17
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800	1800		1800 1800	1800		1800 1800	1800	
Adjustment:	0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00	
Lanes:	0.75 0.25	1.00		0.71 0.29	1.00		1.00 1.00	1.00		1.00 0.95	0.05	
Final Sat.:	1271 454	1800		1210 519	1800		1700 1800	1800		1700 1714	86	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.01	0.03		0.01 0.01	0.00		0.00 0.18	0.01		0.17 0.20	0.20	
Crit Moves:		****						****			****	
Green/Cycle:	0.06 0.06	0.06		0.06 0.06	0.06		0.01 0.43	0.43		0.41 0.83	0.83	
Volume/Cap:	0.22 0.22	0.42		0.12 0.12	0.01		0.24 0.42	0.03		0.42 0.24	0.24	
Delay/Veh:	28.0 28.0	29.8		27.2 27.2	26.6		41.4 12.3	10.0		12.9 1.1	1.1	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	28.0 28.0	29.8		27.2 27.2	26.6		41.4 12.3	10.0		12.9 1.1	1.1	
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	1	1	1	0	0	0	0	4	0	4	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[16.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	40	5	43	14	3	17	17	299	38	26	407	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	5	43	14	3	17	17	299	38	26	407	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	49	6	53	17	4	21	21	367	47	32	500	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	49	6	53	17	4	21	21	367	47	32	500	38
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	725	1011	184	792	1019	250	538	xxxx	xxxxx	414	xxxx	xxxxx
Potent Cap.:	317	241	834	283	239	756	1040	xxxx	xxxxx	1156	xxxx	xxxxx
Move Cap.:	293	230	834	251	227	756	1040	xxxx	xxxxx	1156	xxxx	xxxxx
Volume/Cap:	0.17	0.03	0.06	0.07	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	20.4	xxxx	xxxxx	8.5	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	420	xxxxx	xxxx	xxxx	561	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	16.5	xxxxx	xxxxx	xxxx	11.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	16.5			15.3			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: D[29.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		1	0 0 1	0		1	0 2	0 1		1	0 2	0 1	
Volume Module:																
Base Vol:	89	27	81		26	38	29		30	257	36		56	450	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	89	27	81		26	38	29		30	257	36		56	450	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	94	29	86		27	40	31		32	271	38		59	475	95	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	94	29	86		27	40	31		32	271	38		59	475	95	
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	711	1023	136		807	966	238		570	xxxx	xxxxx		309	xxxx	xxxxx	
Potent Cap.:	324	237	894		276	256	770		1012	xxxx	xxxxx		1263	xxxx	xxxxx	
Move Cap.:	255	219	894		212	237	770		1012	xxxx	xxxxx		1263	xxxx	xxxxx	
Volume/Cap:	0.37	0.13	0.10		0.13	0.17	0.04		0.03	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.4	xxxx	xxxxx		0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		24.5	xxxx	xxxxx		8.7	xxxx	xxxxx		8.0	xxxx	xxxxx	
LOS by Move:	*	*	*		C	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	350	xxxxx		xxxx	xxxx	338		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	3.6	xxxxx		xxxxx	xxxx	0.8		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	29.2	xxxxx		xxxxx	xxxx	18.4		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	D	*		*	*	C		*	*	*		*	*	*	
ApproachDel:		29.2				20.1				xxxxxx				xxxxxx		
ApproachLOS:		D				C				*				*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.350
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	28.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	67	112	119	114	91	90	48	270	40	127	368	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	112	119	114	91	90	48	270	40	127	368	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	127	135	129	103	102	54	306	45	144	416	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	127	135	129	103	102	54	306	45	144	416	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	127	135	129	103	102	54	306	45	144	416	36
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3312	288
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.07	0.08	0.03	0.06	0.03	0.08	0.03	0.08	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.11	0.34	0.34	0.11	0.34	0.34	0.13	0.35	0.35
Volume/Cap:	0.41	0.10	0.22	0.66	0.08	0.17	0.28	0.25	0.07	0.66	0.36	0.36
Delay/Veh:	40.8	21.7	22.8	48.6	21.2	22.0	39.4	22.9	21.5	47.0	23.0	23.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.8	21.7	22.8	48.6	21.2	22.0	39.4	22.9	21.5	47.0	23.0	23.0
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	5	1	2	2	3	1	6	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.380
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	27.6
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	111	159	188	118	91	107	85	310	36	108	413	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	159	188	118	91	107	85	310	36	108	413	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	119	171	202	127	98	115	91	333	39	116	443	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	171	202	127	98	115	91	333	39	116	443	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	171	202	127	98	115	91	333	39	116	443	59
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3177	423
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.11	0.07	0.03	0.06	0.05	0.09	0.02	0.07	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.63	0.14	0.32	0.69	0.08	0.18	0.48	0.27	0.06	0.63	0.40	0.40
Delay/Veh:	45.7	20.6	22.3	49.7	20.3	21.2	40.3	21.7	20.0	45.9	23.1	23.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.7	20.6	22.3	49.7	20.3	21.2	40.3	21.7	20.0	45.9	23.1	23.1
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	4	5	1	2	3	3	1	4	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 0 1!	0	0
Volume Module:												
Base Vol:	65	293	149	17	179	64	32	46	27	80	92	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	293	149	17	179	64	32	46	27	80	92	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	79	357	182	21	218	78	39	56	33	98	112	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	357	182	21	218	78	39	56	33	98	112	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	357	182	21	218	78	39	56	33	98	112	29
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.42	0.58	1.00	0.42	0.46	0.12
Final Sat.:	1700	1800	1800	1700	1800	1800	721	1037	1800	717	825	215
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.10	0.01	0.12	0.04	0.05	0.05	0.02	0.14	0.14	0.14
Crit Moves:		****									****	
Green/Cycle:	0.55	0.55	0.55	0.55	0.55	0.55	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.08	0.36	0.18	0.02	0.22	0.08	0.14	0.14	0.05	0.36	0.36	0.36
Delay/Veh:	6.3	7.7	6.7	6.1	6.9	6.3	12.3	12.3	11.8	13.7	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.3	7.7	6.7	6.1	6.9	6.3	12.3	12.3	11.8	13.7	13.7	13.7
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	4	2	0	2	1	1	1	0	3	3	3

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.366
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	7.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	56	405	223	16	97	95	28	37	19	51	52	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	405	223	16	97	95	28	37	19	51	52	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	63	458	252	18	110	107	32	42	21	58	59	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	458	252	18	110	107	32	42	21	58	59	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	458	252	18	110	107	32	42	21	58	59	37
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.44	0.56	1.00	0.39	0.37	0.24
Final Sat.:	1700	1800	1800	1700	1800	1800	756	999	1800	660	673	427
Capacity Analysis Module:												
Vol/Sat:	0.04	0.25	0.14	0.01	0.06	0.06	0.04	0.04	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.06	0.44	0.24	0.02	0.10	0.10	0.12	0.12	0.03	0.25	0.25	0.25
Delay/Veh:	5.4	7.3	6.2	5.3	5.6	5.6	13.3	13.3	12.9	14.1	14.1	14.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.3	6.2	5.3	5.6	5.6	13.3	13.3	12.9	14.1	14.1	14.1
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	5	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[19.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	1 0	0	0	1 0	1	0	1 0	1	0
Volume Module:												
Base Vol:	3	0	6	2	0	0	0	466	2	10	627	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	6	2	0	0	0	466	2	10	627	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	4	0	7	2	0	0	0	570	2	12	767	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	0	7	2	0	0	0	570	2	12	767	1
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1362	1363	570	1366	xxxx	xxxxx	xxxx	xxxx	xxxxx	572	xxxx	xxxxx
Potent Cap.:	126	149	525	126	xxxx	xxxxx	xxxx	xxxx	xxxxx	1010	xxxx	xxxxx
Move Cap.:	125	147	525	123	xxxx	xxxxx	xxxx	xxxx	xxxxx	1010	xxxx	xxxxx
Total Cap:	254	270	xxxxx	250	268	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	19.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	388	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	14.6			19.5			xxxxxx			xxxxxx		
ApproachLOS:	B			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[17.8]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	10	0	7	5	0	2	3	698	2		14	548	2							
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
Initial Bse:	10	0	7	5	0	2	3	698	2		14	548	2							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94							
PHF Volume:	11	0	7	5	0	2	3	745	2		15	585	2							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	11	0	7	5	0	2	3	745	2		15	585	2							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	1368	1368	745	1371	1368	585	587	xxxx	xxxxx		747	xxxx	xxxxx							
Potent Cap.:	125	148	417	125	148	515	998	xxxx	xxxxx		870	xxxx	xxxxx							
Move Cap.:	123	145	417	121	145	515	998	xxxx	xxxxx		870	xxxx	xxxxx							
Total Cap:	254	269	xxxxx	247	265	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
Volume/Cap:	0.04	0.00	0.02	0.02	0.00	0.00	0.00	xxxx	xxxx		0.02	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.1	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx		9.2	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		302	xxxxx		xxxx		290	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.2	xxxxx		xxxxx		0.1	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		17.7	xxxxx		xxxxx		17.8	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		C	*		*	*	*			*	*	*		
ApproachDel:	17.7					17.8					xxxxxx					xxxxxx				
ApproachLOS:	C					C					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[18.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	7		1		18		11		2		22		19		387		18		11		516		14	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	7		1		18		11		2		22		19		387		18		11		516		14	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89	
PHF Volume:	8		1		20		12		2		25		21		436		20		12		582		16	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	8		1		20		12		2		25		21		436		20		12		582		16	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1107		1101		436		1114		1113		589		597	xxxx	xxxxx		456		xxxx	xxxx	xxxxx			
Potent Cap.:	189		214		624		187		210		512		989	xxxx	xxxxx		1115		xxxx	xxxx	xxxxx			
Move Cap.:	174		207		624		176		203		512		989	xxxx	xxxxx		1115		xxxx	xxxx	xxxxx			
Volume/Cap:	0.05		0.01		0.03		0.07		0.01		0.05		0.02	xxxx	xxxx		0.01		xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1	xxxx	xxxxx		0.0		xxxx	xxxx	xxxxx			
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.7	xxxx	xxxxx		8.3		xxxx	xxxx	xxxxx			
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		352	xxxxx			xxxx		303	xxxxx			xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx		0.3	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx		16.2	xxxxx			xxxxx		18.6	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Shared LOS:	*		C	*			*		C	*			*	*	*		*	*	*					
ApproachDel:	16.2						18.6						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: D[25.6]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	0	1	0
Volume Module:																				
Base Vol:	11	0	11			17	0	18			34	575	12			18	540	18		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	11	0	11			17	0	18			34	575	12			18	540	18		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	12	0	12			18	0	19			36	605	13			19	568	19		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	12	0	12			18	0	19			36	605	13			19	568	19		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1302	1302	605			1304	1305	578			587	xxxx	xxxxx			618	xxxx	xxxxx		
Potent Cap.:	139	162	501			139	162	519			998	xxxx	xxxxx			972	xxxx	xxxxx		
Move Cap.:	128	153	501			130	153	519			998	xxxx	xxxxx			972	xxxx	xxxxx		
Volume/Cap:	0.09	0.00	0.02			0.14	0.00	0.04			0.04	xxxx	xxxx			0.02	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.1	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.7	xxxx	xxxxx			8.8	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		205	xxxxx		xxxx		211	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.4	xxxxx		xxxxx		0.6	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		24.8	xxxxx		xxxxx		25.6	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		D	*		*	*	*			*	*	*		
ApproachDel:	24.8					25.6					xxxxxx					xxxxxx				
ApproachLOS:	C					D					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.399
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10	28	28				10	28	28				10	40	40				10	40	40			
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	9	15	190				60	38	85				36	344	8				108	421	32			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	9	15	190				60	38	85				36	344	8				108	421	32			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	11	18	233				73	47	104				44	421	10				132	516	39			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	11	18	233				73	47	104				44	421	10				132	516	39			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	11	18	233				73	47	104				44	421	10				132	516	39			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	2.00	1.00				1.00	2.00	1.00			
Final Sat.:	1700	1800	1800				1700	1800	1800				1700	3600	1800				1700	3600	1800			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.13				0.04	0.03	0.06				0.03	0.12	0.01				0.08	0.14	0.02			
Crit Moves:			****				****							****					****					
Green/Cycle:	0.10	0.28	0.28				0.10	0.28	0.28				0.11	0.40	0.40				0.14	0.43	0.43			
Volume/Cap:	0.06	0.04	0.46				0.43	0.09	0.21				0.24	0.29	0.01				0.56	0.33	0.05			
Delay/Veh:	40.9	26.2	30.4				44.1	26.7	27.7				41.5	20.5	18.1				43.0	19.0	16.5			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	40.9	26.2	30.4				44.1	26.7	27.7				41.5	20.5	18.1				43.0	19.0	16.5			
LOS by Move:	D		C		C		D		C		C		D		C		B		D		B		B	
HCM2kAvgQ:	0		0		6		3		1		2		1		4		0		5		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.361
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	24.3
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	18	50	193	58	30	46	98	485	12	84	445	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	50	193	58	30	46	98	485	12	84	445	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	18	51	198	60	31	47	101	498	12	86	457	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	51	198	60	31	47	101	498	12	86	457	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	51	198	60	31	47	101	498	12	86	457	61
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.11	0.04	0.02	0.03	0.06	0.14	0.01	0.05	0.13	0.03
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.29	0.29	0.10	0.29	0.29	0.10	0.42	0.42	0.10	0.42	0.42
Volume/Cap:	0.10	0.10	0.38	0.34	0.06	0.09	0.57	0.33	0.02	0.49	0.30	0.08
Delay/Veh:	39.2	24.9	27.5	41.0	24.5	24.8	45.3	19.1	16.5	42.7	18.8	16.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.2	24.9	27.5	41.0	24.5	24.8	45.3	19.1	16.5	42.7	18.8	16.9
LOS by Move:	D	C	C	D	C	C	D	B	B	D	B	B
HCM2kAvgQ:	1	1	5	2	1	1	4	5	0	3	5	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: D[33.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0	1! 0	0		0 0	1! 0	0		1 0	1 0	1		1 0	1 0	1	
Volume Module:																
Base Vol:	25	2	33		6	1	6		4	591	20		17	572	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	25	2	33		6	1	6		4	591	20		17	572	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86	
PHF Volume:	29	2	38		7	1	7		5	686	23		20	664	9	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	29	2	38		7	1	7		5	686	23		20	664	9	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1408	1409	686		1431	1423	664		674	xxxx	xxxxx		710	xxxx	xxxxx	
Potent Cap.:	117	140	451		113	137	464		927	xxxx	xxxxx		899	xxxx	xxxxx	
Move Cap.:	113	136	451		100	134	464		927	xxxx	xxxxx		899	xxxx	xxxxx	
Volume/Cap:	0.26	0.02	0.09		0.07	0.01	0.02		0.01	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.9	xxxx	xxxxx		9.1	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	194	xxxxx		xxxx	162	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.5	xxxxx		xxxxx	0.3	xxxxx		xxxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	33.7	xxxxx		xxxxx	29.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	D	*		*	D	*		*	*	*		*	*	*	
ApproachDel:		33.7				29.5				xxxxxx				xxxxxx		
ApproachLOS:		D				D				*				*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: E[35.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	28	0	18				5	2	8				10	673	52				38	572	6			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	28	0	18				5	2	8				10	673	52				38	572	6			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	28	0	18				5	2	8				10	683	53				39	580	6			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	28	0	18				5	2	8				10	683	53				39	580	6			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1369	1367	683				1396	1414	580				587	xxxx	xxxxx				736	xxxx	xxxxx			
Potent Cap.:	125	148	453				120	139	518				998	xxxx	xxxxx				879	xxxx	xxxxx			
Move Cap.:	117	140	453				110	132	518				998	xxxx	xxxxx				879	xxxx	xxxxx			
Volume/Cap:	0.24	0.00	0.04				0.05	0.02	0.02				0.01	xxxx	xxxx				0.04	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.6	xxxx	xxxxx				9.3	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		164	xxxxx			xxxx		197	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.1	xxxxx			xxxxx		0.2	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		35.4	xxxxx			xxxxx		24.8	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	35.4						24.8						xxxxxx						xxxxxx					
ApproachLOS:	E						C						*						*					

Note: Queue reported is the number of cars per lane.

Existing Plus Project

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.402
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0 1	0
Volume Module:												
Base Vol:	16	3	65	5	12	0	3	277	30	202	202	7
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	16	3	65	5	12	0	3	277	30	202	202	7
Added Vol:	0	0	8	0	0	0	0	0	0	6	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	3	73	5	12	0	3	277	30	208	202	7
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88	
PHF Volume:	18	3	83	6	14	0	3	317	34	238	231	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	3	83	6	14	0	3	317	34	238	231	8
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	18	3	83	6	14	0	3	317	34	238	231	8
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800	1800		1800 1800	1800		1800 1800	1800	
Adjustment:	0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00	
Lanes:	0.85 0.15	1.00		0.31 0.69	1.00		1.00 1.00	1.00		1.00 0.97	0.03	
Final Sat.:	1444 271	1800		520 1249	1800		1700 1800	1800		1700 1740	60	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.01	0.05		0.01 0.01	0.00		0.00 0.18	0.02		0.14 0.13	0.13	
Crit Moves:		****						****		****		
Green/Cycle:	0.12 0.12	0.12		0.12 0.12	0.00		0.01 0.44	0.44		0.35 0.77	0.77	
Volume/Cap:	0.11 0.11	0.40		0.10 0.10	0.00		0.17 0.40	0.04		0.40 0.17	0.17	
Delay/Veh:	24.0 24.0	25.9		24.0 24.0	0.0		33.4 11.9	9.7		15.3 1.8	1.8	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	24.0 24.0	25.9		24.0 24.0	0.0		33.4 11.9	9.7		15.3 1.8	1.8	
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	0	0	2	0	0	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.436
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	14	5	37				7	3	1				2	264	21				240	279	14			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	14	5	37				7	3	1				2	264	21				240	279	14			
Added Vol:	0	0	11				0	0	0				0	0	0				11	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	14	5	48				7	3	1				2	264	21				251	279	14			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	17	6	59				9	4	1				2	323	26				307	341	17			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	17	6	59				9	4	1				2	323	26				307	341	17			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	17	6	59				9	4	1				2	323	26				307	341	17			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.75	0.25	1.00				0.71	0.29	1.00				1.00	1.00	1.00				1.00	0.95	0.05			
Final Sat.:	1271	454	1800				1210	519	1800				1700	1800	1800				1700	1714	86			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.03				0.01	0.01	0.00				0.00	0.18	0.01				0.18	0.20	0.20			
Crit Moves:			****											****					****					
Green/Cycle:	0.07	0.07	0.07				0.07	0.07	0.07				0.01	0.41	0.41				0.41	0.82	0.82			
Volume/Cap:	0.18	0.18	0.44				0.09	0.09	0.01				0.24	0.44	0.03				0.44	0.24	0.24			
Delay/Veh:	26.7	26.7	28.8				26.2	26.2	25.7				41.9	13.1	10.6				13.0	1.3	1.3			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	26.7	26.7	28.8				26.2	26.2	25.7				41.9	13.1	10.6				13.0	1.3	1.3			
LOS by Move:	C	C	C				C	C	C				D	B	B				B	A	A			
HCM2kAvgQ:	1	1	2				0	0	0				0	5	0				5	2	2			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[17.1]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	40	5	43			14	3	17			17	299	38			26	407	31		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	40	5	43			14	3	17			17	299	38			26	407	31		
Added Vol:	0	0	0			8	0	0			0	15	0			0	12	6		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	40	5	43			22	3	17			17	314	38			26	419	37		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.81	0.81	0.81			0.81	0.81	0.81			0.81	0.81	0.81			0.81	0.81	0.81		
PHF Volume:	49	6	53			27	4	21			21	386	47			32	515	45		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	49	6	53			27	4	21			21	386	47			32	515	45		
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9			7.5	6.5	6.9			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	750	1051	193			816	1053	257			560	xxxx	xxxxx			432	xxxx	xxxxx		
Potent Cap.:	303	229	822			272	228	748			1021	xxxx	xxxxx			1138	xxxx	xxxxx		
Move Cap.:	281	218	822			240	217	748			1021	xxxx	xxxxx			1138	xxxx	xxxxx		
Volume/Cap:	0.18	0.03	0.06			0.11	0.02	0.03			0.02	xxxx	xxxx			0.03	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			0.4	xxxx	xxxxx			0.1	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			21.9	xxxx	xxxxx			8.6	xxxx	xxxxx			8.3	xxxx	xxxxx		
LOS by Move:	*	*	*			C	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	404	xxxxx			xxxx	xxxx	547			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	1.1	xxxxx			xxxxx	xxxx	0.1			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	17.1	xxxxx			xxxxx	xxxx	11.9			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	C	*			*	*	B			*	*	*			*	*	*		
ApproachDel:	17.1					17.1					xxxxxx					xxxxxx				
ApproachLOS:	C					C					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[14.2]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0 0 1	0	1	0 2	0 1				1	0 2	0 1			
Volume Module:																		
Base Vol:	40	5	43	14	3	17	17	299	38				26	407	31			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	40	5	43	14	3	17	17	299	38				26	407	31			
Added Vol:	0	0	0	8	0	0	0	15	0				0	12	6			
PasserByVol:	-40	-5	40	-14	-3	0	0	0	0				0	40	0			
Initial Fut:	0	0	83	8	0	17	17	314	38				26	459	37			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81			
PHF Volume:	0	0	102	10	0	21	21	386	47				32	564	45			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	0	0	102	10	0	21	21	386	47				32	564	45			
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	773	1100	193	862	1102	282	609	xxxx	xxxxx				432	xxxx	xxxxx			
Potent Cap.:	292	214	822	252	213	721	979	xxxx	xxxxx				1138	xxxx	xxxxx			
Move Cap.:	273	203	822	213	203	721	979	xxxx	xxxxx				1138	xxxx	xxxxx			
Volume/Cap:	0.00	0.00	0.12	0.05	0.00	0.03	0.02	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	22.8	xxxx	xxxxx	8.8	xxxx	xxxxx				8.3	xxxx	xxxxx			
LOS by Move:	*	*	*	C	*	*	A	*	*				A	*	*			
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT				LT	- LTR	- RT			
Shared Cap.:	xxxx	822	xxxxx	xxxx	xxxx	721	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	10.0	xxxxx	xxxxx	xxxx	10.1	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	A	*	*	*	B	*	*	*				*	*	*			
ApproachDel:	10.0			14.2			xxxxxx						xxxxxx					
ApproachLOS:	A			B			*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 7.5 Worst Case Level Of Service: D[33.3]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R		L	-	T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled					Uncontrolled				
Rights:	Include				Include				Include					Include				
Lanes:	0	0	1! 0	0	1	0	0	1 0	1	0	2	0	1	1	0	2	0	1
Volume Module:																		
Base Vol:	89	27	81		26	38	29		30	257	36			56	450	90		
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	89	27	81		26	38	29		30	257	36			56	450	90		
Added Vol:	0	0	0		11	0	0		0	23	0			0	23	11		
PasserByVol:	0	0	0		0	0	0		0	0	0			0	0	0		
Initial Fut:	89	27	81		37	38	29		30	280	36			56	473	101		
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	94	29	86		39	40	31		32	296	38			59	500	107		
Reduct Vol:	0	0	0		0	0	0		0	0	0			0	0	0		
FinalVolume:	94	29	86		39	40	31		32	296	38			59	500	107		
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																		
Cnflict Vol:	747	1084	148		843	1015	250		606	xxxx	xxxxx			334	xxxx	xxxxx		
Potent Cap.:	305	219	879		260	240	756		982	xxxx	xxxxx			1237	xxxx	xxxxx		
Move Cap.:	237	202	879		197	221	756		982	xxxx	xxxxx			1237	xxxx	xxxxx		
Volume/Cap:	0.40	0.14	0.10		0.20	0.18	0.04		0.03	xxxx	xxxx			0.05	xxxx	xxxx		
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx		0.7	xxxx	xxxxx		0.1	xxxx	xxxxx			0.2	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		27.7	xxxx	xxxxx		8.8	xxxx	xxxxx			8.1	xxxx	xxxxx		
LOS by Move:	*	*	*		D	*	*		A	*	*			A	*	*		
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT		LT	-	LTR	- RT	
Shared Cap.:	xxxx		328	xxxxx	xxxx	xxxx		319	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		4.1	xxxxx	xxxxx	xxxx		0.8	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		33.3	xxxxx	xxxxx	xxxx		19.5	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		D	*	*	*		C	*	*	*			*	*	*		
ApproachDel:	33.3				22.4				xxxxxx					xxxxxx				
ApproachLOS:	D				C				*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: C[15.1]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	89	27	81	26	38	29	30	257	36	56	450	90								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	89	27	81	26	38	29	30	257	36	56	450	90								
Added Vol:	0	0	0	11	0	0	0	23	0	0	23	11								
PasserByVol:	-89	-27	89	-26	-38	0	0	0	0	0	89	0								
Initial Fut:	0	0	170	11	0	29	30	280	36	56	562	101								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	0	0	180	12	0	31	32	296	38	59	594	107								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	180	12	0	31	32	296	38	59	594	107								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	774	1178	148	923	1109	297	700	xxxx	xxxxx	334	xxxx	xxxxx								
Potent Cap.:	292	193	879	228	211	706	906	xxxx	xxxxx	1237	xxxx	xxxxx								
Move Cap.:	262	177	879	170	194	706	906	xxxx	xxxxx	1237	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.20	0.07	0.00	0.04	0.03	xxxx	xxxx	0.05	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	27.7	xxxx	xxxxx	9.1	xxxx	xxxxx	8.1	xxxx	xxxxx								
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		879	xxxxx		xxxx	xxxx		706		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.8	xxxxx		xxxxx	xxxx		0.1		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		10.1	xxxxx		xxxxx	xxxx		10.3		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*	*		B		*	*	*			*	*	*		
ApproachDel:	10.1			15.1			xxxxxx			xxxxxx										
ApproachLOS:	B			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.405
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 29.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	67	112	119	114	91	90	48	270	40	127	368	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	112	119	114	91	90	48	270	40	127	368	32
Added Vol:	0	0	30	15	0	0	0	23	0	24	18	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	112	149	129	91	90	48	293	40	151	386	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	127	169	146	103	102	54	332	45	171	437	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	127	169	146	103	102	54	332	45	171	437	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	127	169	146	103	102	54	332	45	171	437	50
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3232	368
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.09	0.09	0.03	0.06	0.03	0.09	0.03	0.10	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.11	0.32	0.32	0.15	0.36	0.36
Volume/Cap:	0.41	0.11	0.29	0.67	0.08	0.17	0.28	0.29	0.08	0.67	0.38	0.38
Delay/Veh:	43.0	24.0	25.8	49.0	22.5	23.3	41.2	25.6	23.8	46.6	24.2	24.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.0	24.0	25.8	49.0	22.5	23.3	41.2	25.6	23.8	46.6	24.2	24.2
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	4	6	1	2	2	4	1	6	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 85 Critical Vol./Cap.(X): 0.312
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 20.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		32		32		10		31		31		10		32		32		10		31		31	
Lanes:	1	0	2	0	1		1	0	2	0	1		1	0	2	0	1		1	0	1	1	0	
Volume Module:																								
Base Vol:	67		112		119		114		91		90		48		270		40		127		368		32	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	67		112		119		114		91		90		48		270		40		127		368		32	
Added Vol:	0		0		30		15		0		0		0		23		0		24		18		12	
PasserByVol:	0		5		0		11		5		0		38		-11		-2		0		0		0	
Initial Fut:	67		117		149		140		96		90		86		282		38		151		386		44	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88	
PHF Volume:	76		132		169		158		109		102		97		319		43		171		437		50	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	76		132		169		158		109		102		97		319		43		171		437		50	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	76		132		169		158		109		102		97		319		43		171		437		50	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		2.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00		1.00		1.80		0.20	
Final Sat.:	1700		3600		1800		1700		3600		1800		1700		3600		1800		1700		3232		368	
Capacity Analysis Module:																								
Vol/Sat:	0.04		0.04		0.09		0.09		0.03		0.06		0.06		0.09		0.02		0.10		0.14		0.14	
Crit Moves:					****										****				****					
Green/Cycle:	0.38		0.38		0.38		0.38		0.38		0.38		0.13		0.38		0.38		0.15		0.40		0.40	
Volume/Cap:	0.12		0.10		0.25		0.25		0.08		0.15		0.44		0.24		0.06		0.66		0.34		0.34	
Delay/Veh:	17.4		17.2		18.4		18.4		17.1		17.6		35.6		18.2		17.0		39.9		17.8		17.8	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	17.4		17.2		18.4		18.4		17.1		17.6		35.6		18.2		17.0		39.9		17.8		17.8	
LOS by Move:	B		B		B		B		B		B		D		B		B		D		B		B	
HCM2kAvgQ:	1		1		3		3		1		2		3		3		1		6		4		4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.467
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 30.4
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32		32	10	31		31	10	32		32	10	31		31
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0
Volume Module:																
Base Vol:	111	159		188	118	91		107	85	310		36	108	413		55
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	111	159		188	118	91		107	85	310		36	108	413		55
Added Vol:	0	0		45	23	0		0	0	34		0	46	34		23
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	111	159		233	141	91		107	85	344		36	154	447		78
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93
PHF Volume:	119	171		250	151	98		115	91	369		39	165	480		84
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	119	171		250	151	98		115	91	369		39	165	480		84
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	119	171		250	151	98		115	91	369		39	165	480		84
Saturation Flow Module:																
Sat/Lane:	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	1.00	2.00		1.00	1.00	2.00		1.00	1.00	2.00		1.00	1.00	1.70		0.30
Final Sat.:	1700	3600		1800	1700	3600		1800	1700	3600		1800	1700	3065		535
Capacity Analysis Module:																
Vol/Sat:	0.07	0.05		0.14	0.09	0.03		0.06	0.05	0.10		0.02	0.10	0.16		0.16
Crit Moves:				****	****					****			****			
Green/Cycle:	0.11	0.34		0.34	0.12	0.34		0.34	0.11	0.34		0.34	0.13	0.35		0.35
Volume/Cap:	0.63	0.14		0.41	0.77	0.08		0.19	0.47	0.30		0.06	0.77	0.45		0.45
Delay/Veh:	47.4	22.0		24.7	57.5	21.2		22.1	41.3	23.4		21.4	55.6	24.0		24.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	47.4	22.0		24.7	57.5	21.2		22.1	41.3	23.4		21.4	55.6	24.0		24.0
LOS by Move:	D	C		C	E	C		C	D	C		C	E	C		C
HCM2kAvgQ:	5	2		6	6	1		2	3	4		1	7	7		7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.365
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	23.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	111	159	188	118	91	107	85	310	36	108	413	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	159	188	118	91	107	85	310	36	108	413	55
Added Vol:	0	0	45	23	0	0	0	34	0	46	34	23
PasserByVol:	0	27	0	19	43	0	84	-19	-2	0	0	0
Initial Fut:	111	186	233	160	134	107	169	325	34	154	447	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	119	200	250	172	144	115	181	349	36	165	480	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	200	250	172	144	115	181	349	36	165	480	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	200	250	172	144	115	181	349	36	165	480	84
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.70	0.30
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3065	535
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.14	0.10	0.04	0.06	0.11	0.10	0.02	0.10	0.16	0.16
Crit Moves:			****					****		****		
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.14	0.36	0.36	0.20	0.42	0.42
Volume/Cap:	0.20	0.16	0.39	0.28	0.11	0.18	0.79	0.27	0.06	0.49	0.37	0.37
Delay/Veh:	20.3	19.8	22.1	21.0	19.5	20.1	54.0	20.8	19.1	33.0	18.1	18.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.3	19.8	22.1	21.0	19.5	20.1	54.0	20.8	19.1	33.0	18.1	18.1
LOS by Move:	C	B	C	C	B	C	D	C	B	C	B	B
HCM2kAvgQ:	2	2	5	4	1	2	7	3	1	5	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.367
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 9.3
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	65	293	149		17	179	64		32	46	27		80	92	24	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	65	293	149		17	179	64		32	46	27		80	92	24	
Added Vol:	0	15	0		0	12	12		15	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	65	308	149		17	191	76		47	46	27		80	92	24	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	79	376	182		21	233	93		57	56	33		98	112	29	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	79	376	182		21	233	93		57	56	33		98	112	29	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	79	376	182		21	233	93		57	56	33		98	112	29	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.52	0.48	1.00		0.42	0.46	0.12	
Final Sat.:	1700	1800	1800		1700	1800	1800		883	865	1800		717	825	215	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.21	0.10		0.01	0.13	0.05		0.06	0.06	0.02		0.14	0.14	0.14	
Crit Moves:		****												****		
Green/Cycle:	0.57	0.57	0.57		0.57	0.57	0.57		0.37	0.37	0.37		0.37	0.37	0.37	
Volume/Cap:	0.08	0.37	0.18		0.02	0.23	0.09		0.18	0.18	0.05		0.37	0.37	0.37	
Delay/Veh:	6.4	7.9	6.8		6.1	7.1	6.4		13.9	13.9	13.2		15.3	15.3	15.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.4	7.9	6.8		6.1	7.1	6.4		13.9	13.9	13.2		15.3	15.3	15.3	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	4	2		0	2	1		2	2	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.379
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	56	405	223		16	97	95		28	37	19		51	52	33	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	56	405	223		16	97	95		28	37	19		51	52	33	
Added Vol:	0	23	0		0	23	23		23	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	56	428	223		16	120	118		51	37	19		51	52	33	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	63	484	252		18	136	133		58	42	21		58	59	37	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	63	484	252		18	136	133		58	42	21		58	59	37	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	63	484	252		18	136	133		58	42	21		58	59	37	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.59	0.41	1.00		0.39	0.37	0.24	
Final Sat.:	1700	1800	1800		1700	1800	1800		1009	732	1800		660	673	427	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.27	0.14		0.01	0.08	0.07		0.06	0.06	0.01		0.09	0.09	0.09	
Crit Moves:		****												****		
Green/Cycle:	0.62	0.62	0.62		0.62	0.62	0.62		0.32	0.32	0.32		0.32	0.32	0.32	
Volume/Cap:	0.06	0.44	0.23		0.02	0.12	0.12		0.18	0.18	0.04		0.27	0.27	0.27	
Delay/Veh:	5.0	6.9	5.7		4.9	5.2	5.2		15.9	15.9	15.1		16.6	16.6	16.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	5.0	6.9	5.7		4.9	5.2	5.2		15.9	15.9	15.1		16.6	16.6	16.6	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	5	2		0	1	1		2	2	0		2	2	2	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[22.1]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	466	2		10	627	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	466	2		10	627	1	
Added Vol:	6	0	12	0	0	0	0	45	23		8	47	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	9	0	18	2	0	0	0	511	25		18	674	1	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	11	0	22	2	0	0	0	625	31		22	824	1	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	11	0	22	2	0	0	0	625	31		22	824	1	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1494	1495	625	1520	xxxx	xxxxx	xxxx	xxxx	xxxxx		656	xxxx	xxxxx	
Potent Cap.:	102	124	488	98	xxxx	xxxxx	xxxx	xxxx	xxxxx		941	xxxx	xxxxx	
Move Cap.:	101	121	488	92	xxxx	xxxxx	xxxx	xxxx	xxxxx		941	xxxx	xxxxx	
Total Cap:	226	243	xxxxx	213	235	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.05	0.00	0.05	0.01	xxxx	xxxx	xxxx	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	22.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.9	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	*	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	352	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	16.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	*	*	*	*	*		*	*	*	
ApproachDel:	16.3			22.1			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[21.3]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		0 0 1! 0	0		1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	10	0	7	5	0	2	3	698	2		14	548	2	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
Initial Bse:	10	0	7	5	0	2	3	698	2		14	548	2	
Added Vol:	11	0	23	0	0	0	0	67	34		11	91	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	21	0	30	5	0	2	3	765	36		25	639	2	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
PHF Adj:	0.94 0.94	0.94		0.94 0.94	0.94		0.94 0.94	0.94	0.94		0.94 0.94	0.94		
PHF Volume:	22	0	32	5	0	2	3	817	38		27	682	2	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	22	0	32	5	0	2	3	817	38		27	682	2	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1560	1560	817	1594	1597	682	684	xxxx	xxxxx		855	xxxx	xxxxx	
Potent Cap.:	92	113	380	87	108	453	919	xxxx	xxxxx		793	xxxx	xxxxx	
Move Cap.:	89	109	380	78	104	453	919	xxxx	xxxxx		793	xxxx	xxxxx	
Total Cap:	215	232	xxxxx	190	219	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.10 0.00	0.08		0.03 0.00	0.00		0.00	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx		9.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	288	xxxxx	xxxx	228	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	20.4	xxxxx	xxxxx	21.3	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	20.4			21.3			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[14.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	423	0	0	544	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	423	0	0	544	0
Added Vol:	6	0	18	0	0	0	0	34	23	8	49	0
PasserByVol:	10	0	0	0	0	0	0	0	12	10	0	0
Initial Fut:	16	0	18	0	0	0	0	457	35	18	593	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	0	20	0	0	0	0	520	40	20	674	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	18	0	20	0	0	0	0	520	40	20	674	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1235	1235	520	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	559	xxxx	xxxxx
Potent Cap.:	197	178	560	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1022	xxxx	xxxxx
Move Cap.:	194	174	560	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1022	xxxx	xxxxx
Total Cap:	330	295	xxxxx	268	284	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	422	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		14.4		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[20.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	621	0	0	568	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	621	0	0	568	0
Added Vol:	11	0	34	0	0	0	0	57	34	11	91	0
PasserByVol:	44	0	3	0	0	0	0	0	29	19	0	0
Initial Fut:	55	0	37	0	0	0	0	678	63	30	659	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	58	0	39	0	0	0	0	717	67	32	697	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	58	0	39	0	0	0	0	717	67	32	697	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1478	1478	717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	784	xxxx	xxxxx
Potent Cap.:	140	127	433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	843	xxxx	xxxxx
Move Cap.:	136	122	433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	843	xxxx	xxxxx
Total Cap:	275	247	xxxxx	201	228	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.21	0.00	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	322	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	20.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		20.9		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module:																								
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	423	0	0	0	0	544	0			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	423	0	0	0	0	544	0			
Added Vol:	0	0	12	0	0	0	0	0	0	0	0	0	0	0	30	23	0	0	0	56	0			
PasserByVol:	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0			
Initial Fut:	0	0	29	0	0	0	0	0	0	0	0	0	0	0	453	51	0	0	0	600	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
PHF Volume:	0	0	33	0	0	0	0	0	0	0	0	0	0	0	515	58	0	0	0	682	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	0	0	33	0	0	0	0	0	0	0	0	0	0	0	515	58	0	0	0	682	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	515	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Potent Cap.:	xxxx	xxxx	564	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Move Cap.:	xxxx	xxxx	564	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Total Cap:	345	309	xxxxx	277	297	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	11.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*												
ApproachDel:	11.8			xxxxxx			xxxxxx			xxxxxx														
ApproachLOS:	B			*			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[15.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	621	0	0	568	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	621	0	0	568	0
Added Vol:	0	0	23	0	0	0	0	57	34	0	102	0
PasserByVol:	0	0	46	0	0	0	0	0	34	0	0	0
Initial Fut:	0	0	69	0	0	0	0	678	68	0	670	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	73	0	0	0	0	717	72	0	709	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	73	0	0	0	0	717	72	0	709	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	292	262	xxxxx	205	249	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.17	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.6	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	15.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: F[57.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	7		1		18		11		2		22		19		387		18		11		516		14	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	7		1		18		11		2		22		19		387		18		11		516		14	
Added Vol:	41		6		0		0		0		8		0		41		0		45		8		0	
PasserByVol:	0		3		0		0		3		0		0		0		15		15		0		0	
Initial Fut:	48		10		18		11		5		30		19		428		33		71		524		14	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89	
PHF Volume:	54		11		20		12		6		34		21		482		37		80		591		16	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	54		11		20		12		6		34		21		482		37		80		591		16	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1303		1292		482		1318		1321		598		606	xxxx	xxxxx		520		xxxx	xxxx	xxxxx			
Potent Cap.:	139		165		588		136		158		506		982	xxxx	xxxxx		1057		xxxx	xxxx	xxxxx			
Move Cap.:	116		149		588		114		143		506		982	xxxx	xxxxx		1057		xxxx	xxxx	xxxxx			
Volume/Cap:	0.46		0.08		0.03		0.11		0.04		0.07		0.02	xxxx	xxxx		0.08		xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1	xxxx	xxxxx		0.2		xxxx	xxxx	xxxxx			
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.7	xxxx	xxxxx		8.7		xxxx	xxxx	xxxxx			
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		149		xxxxx		xxxx		242		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		3.0		xxxxx		xxxxx		0.8		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		57.6		xxxxx		xxxxx		23.9		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxx	xxxxx			
Shared LOS:	*		F		*		*		C		*		*		*		*		*		*		*	
ApproachDel:	57.6						23.9						xxxxxx						xxxxxx					
ApproachLOS:	F						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 85 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 14.8
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	19	19	19				19	19	19				10	32	32				10	32	32			
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	7	1	18				11	2	22				19	387	18				11	516	14			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	7	1	18				11	2	22				19	387	18				11	516	14			
Added Vol:	41	6	0				0	0	8				0	41	0				45	8	0			
PasserByVol:	0	3	0				0	3	0				0	0	15				15	0	0			
Initial Fut:	48	10	18				11	5	30				19	428	33				71	524	14			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89			
PHF Volume:	54	11	20				12	6	34				21	482	37				80	591	16			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	54	11	20				12	6	34				21	482	37				80	591	16			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	54	11	20				12	6	34				21	482	37				80	591	16			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.36	0.64				1.00	0.14	0.86				1.00	1.00	1.00				1.00	1.00	1.00			
Final Sat.:	1700	643	1157				1700	257	1543				1700	1800	1800				1700	1800	1800			
Capacity Analysis Module:																								
Vol/Sat:	0.03	0.02	0.02				0.01	0.02	0.02				0.01	0.27	0.02				0.05	0.33	0.01			
Crit Moves:	****												****							****				
Green/Cycle:	0.22	0.22	0.22				0.22	0.22	0.22				0.12	0.54	0.54				0.17	0.59	0.59			
Volume/Cap:	0.14	0.08	0.08				0.03	0.10	0.10				0.11	0.50	0.04				0.28	0.56	0.01			
Delay/Veh:	26.6	26.2	26.2				25.8	26.3	26.3				33.7	12.8	9.3				31.4	11.4	7.3			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	26.6	26.2	26.2				25.8	26.3	26.3				33.7	12.8	9.3				31.4	11.4	7.3			
LOS by Move:	C	C	C				C	C	C				C	B	A				C	B	A			
HCM2kAvgQ:	1	1	1				0	1	1				1	8	0				2	10	0			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 63.9 Worst Case Level Of Service: F[593.4]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	0	1	0
Volume Module:																				
Base Vol:	11	0	11			17	0	18			34	575	12			18	540	18		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	11	0	11			17	0	18			34	575	12			18	540	18		
Added Vol:	80	11	0			0	0	11			0	80	0			68	11	0		
PasserByVol:	14	5	34			0	5	2			3	0	0			37	0	0		
Initial Fut:	105	16	45			17	5	31			37	655	12			123	551	18		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	111	17	47			18	5	33			39	689	13			129	580	19		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	111	17	47			18	5	33			39	689	13			129	580	19		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1634	1625	689			1654	1628	589			599	xxxx	xxxxx			702	xxxx	xxxxx		
Potent Cap.:	82	103	449			79	103	512			988	xxxx	xxxxx			905	xxxx	xxxxx		
Move Cap.:	63	85	449			52	85	512			988	xxxx	xxxxx			905	xxxx	xxxxx		
Volume/Cap:	1.75	0.20	0.11			0.34	0.06	0.06			0.04	xxxx	xxxx			0.14	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.1	xxxx	xxxxx			0.5	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.8	xxxx	xxxxx			9.6	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		85	xxxxx		xxxx		119	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		15.4	xxxxx		xxxxx		2.1	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		593	xxxxx		xxxxx		59.5	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		F	*		*		F	*		*	*	*			*	*	*		
ApproachDel:	593.4					59.5					xxxxxx					xxxxxx				
ApproachLOS:	F					F					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.696
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 22.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	19	19	19				19	19	19				10	32	32				10	32	32			
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	0	1		0	1	0	1	0	
Volume Module:																								
Base Vol:	11	0	11				17	0	18				34	575	12				18	540	18			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	11	0	11				17	0	18				34	575	12				18	540	18			
Added Vol:	80	11	0				0	0	11				0	80	0				68	11	0			
PasserByVol:	14	5	34				0	5	2				3	0	0				37	0	0			
Initial Fut:	105	16	45				17	5	31				37	655	12				123	551	18			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	111	17	47				18	5	33				39	689	13				129	580	19			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	111	17	47				18	5	33				39	689	13				129	580	19			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	111	17	47				18	5	33				39	689	13				129	580	19			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.26	0.74				1.00	0.14	0.86				1.00	1.00	1.00				0.37	1.58	0.05			
Final Sat.:	1700	472	1328				1700	250	1550				1700	1800	1800				633	2837	93			
Capacity Analysis Module:																								
Vol/Sat:	0.07	0.04	0.04				0.01	0.02	0.02				0.02	0.38	0.01				0.20	0.20	0.20			
Crit Moves:	****													****					****					
Green/Cycle:	0.20	0.20	0.20				0.20	0.20	0.20				0.18	0.48	0.48				0.26	0.56	0.56			
Volume/Cap:	0.33	0.18	0.18				0.05	0.11	0.11				0.13	0.80	0.01				0.80	0.36	0.36			
Delay/Veh:	33.1	31.8	31.8				30.8	31.2	31.2				33.3	26.0	12.9				38.0	11.6	11.6			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	33.1	31.8	31.8				30.8	31.2	31.2				33.3	26.0	12.9				38.0	11.6	11.6			
LOS by Move:	C	C	C				C	C	C				C	C	B				D	B	B			
HCM2kAvgQ:	3	2	2				0	1	1				1	19	0				12	6	6			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: B[10.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0	0	0	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	26	0	0	31	0	0		0	0		0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	26	0	0	31	0	0		0	0		0	0	0	0	0
Added Vol:	23	0	0	0	30	15	47		0	6		0	0	0	0	0
PasserByVol:	10	0	0	0	0	17	17		0	10		0	0	0	0	0
Initial Fut:	33	26	0	0	61	32	64		0	16		0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81		0.81	0.81	0.81	0.81	0.81
PHF Volume:	41	32	0	0	75	40	79		0	20		0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0		0	0		0	0	0	0	0
FinalVolume:	41	32	0	0	75	40	79		0	20		0	0	0	0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	115	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	209	95	xxxx	xxxx	xxxxx				
Potent Cap.:	1487	xxxx	xxxxx	xxxx	xxxx	xxxxx	784	692	967	xxxx	xxxx	xxxxx				
Move Cap.:	1487	xxxx	xxxxx	xxxx	xxxx	xxxxx	767	672	967	xxxx	xxxx	xxxxx				
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	800	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			10.1			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 6.2 Worst Case Level Of Service: B[11.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0	0	0	1	0	0	0	1! 0	0	0	0	0	0
Volume Module:																
Base Vol:	0	24	0	0	29	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	24	0	0	29	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	34	0	0	0	45	23	91	0	11	0	0	0	0	0	0	0
PasserByVol:	18	0	0	0	0	22	45	0	6	0	0	0	0	0	0	0
Initial Fut:	52	24	0	0	74	45	136	0	17	0	0	0	0	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85 0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	61	28	0	0	87	53	160	0	20	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	61	28	0	0	87	53	160	0	20	0	0	0	0	0	0	0
Critical Gap Module:																
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																
Cnflict Vol:	140 xxxx	xxxxx	xxxx	xxxx	xxxxx	264	264	114	xxxx	xxxx	xxxxx					
Potent Cap.:	1456 xxxx	xxxxx	xxxx	xxxx	xxxxx	729	645	945	xxxx	xxxx	xxxxx					
Move Cap.:	1456 xxxx	xxxxx	xxxx	xxxx	xxxxx	705	617	945	xxxx	xxxx	xxxxx					
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx	xxxx	0.23	0.00	0.02	xxxx	xxxx	xxxx					
Level Of Service Module:																
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*					
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	725	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	0.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.6	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*					
ApproachDel:	xxxxxx			xxxxxx			11.6			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0 0		0 0 0	1 0		0 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	0	26	0	0	31	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	26	0	0	31	0	0	0	0	0	0	0
Added Vol:	0	23	0	0	6	30	0	0	12	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	49	0	0	37	30	0	0	12	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	0	61	0	0	46	37	0	0	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	61	0	0	46	37	0	0	15	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	64	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1006	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1006	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.6	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.407
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	9		15		190		60		38		85		36		344		8		108		421		32	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	9		15		190		60		38		85		36		344		8		108		421		32	
Added Vol:	8		0		0		0		0		23		18		18		6		0		23		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	17		15		190		60		38		108		54		362		14		108		444		32	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	21		18		233		73		47		132		66		443		17		132		544		39	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	21		18		233		73		47		132		66		443		17		132		544		39	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	21		18		233		73		47		132		66		443		17		132		544		39	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.13		0.04		0.03		0.07		0.04		0.12		0.01		0.08		0.15		0.02	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.10		0.29		0.29		0.10		0.29		0.29		0.10		0.42		0.42		0.10		0.42		0.42	
Volume/Cap:	0.12		0.03		0.44		0.42		0.09		0.25		0.37		0.30		0.02		0.75		0.36		0.05	
Delay/Veh:	39.3		24.4		28.3		41.8		24.8		26.2		41.4		18.7		16.5		57.7		19.4		16.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	39.3		24.4		28.3		41.8		24.8		26.2		41.4		18.7		16.5		57.7		19.4		16.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		E		B		B	
HCM2kAvgQ:	1		0		6		3		1		3		2		4		0		6		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 0	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	24	0	0	29	0	0	0	0	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00
Initial Bse:	0	24	0	0	29	0	0	0	0	0	0	0
Added Vol:	0	34	0	0	11	45	0	0	23	0	0	0
PasserByVol:	0	0	0	0	0	15	0	0	12	0	0	0
Initial Fut:	0	58	0	0	40	60	0	0	35	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00
PHF Adj:	0.85 0.85	0.85	0.85	0.85 0.85	0.85	0.85	0.85 0.85	0.85	0.85	0.85 0.85	0.85	0.85
PHF Volume:	0	68	0	0	47	71	0	0	41	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	68	0	0	47	71	0	0	41	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx	82	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx	983	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx	983	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx		
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx		
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	8.8	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.8			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.393
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.7
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	18		50		193		58		30		46		98		485		12		84		445		59	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	18		50		193		58		30		46		98		485		12		84		445		59	
Added Vol:	11		0		0		0		0		34		34		34		11		0		34		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	29		50		193		58		30		80		132		519		23		84		479		59	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	30		51		198		60		31		82		136		533		24		86		492		61	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	30		51		198		60		31		82		136		533		24		86		492		61	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	30		51		198		60		31		82		136		533		24		86		492		61	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.05		0.08		0.15		0.01		0.05		0.14		0.03	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.18		0.10		0.39		0.35		0.06		0.16		0.57		0.34		0.03		0.47		0.34		0.08	
Delay/Veh:	41.7		26.8		29.6		43.2		26.4		27.3		43.4		19.1		16.4		43.8		21.0		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.7		26.8		29.6		43.2		26.4		27.3		43.4		19.1		16.4		43.8		21.0		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		2		5		5		0		3		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: E[43.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25	2	33	6	1	6	4	591	20	17	572	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	25	2	33	6	1	6	4	591	20	17	572	8												
Added Vol:	8	0	0	0	0	0	0	12	6	0	15	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	33	2	33	6	1	6	4	603	26	17	587	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	38	2	38	7	1	7	5	700	30	20	682	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	38	2	38	7	1	7	5	700	30	20	682	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1440	1440	700	1466	1461	682	691	xxxx	xxxxx	731	xxxx	xxxxx												
Potent Cap.:	112	134	443	107	130	453	913	xxxx	xxxxx	883	xxxx	xxxxx												
Move Cap.:	107	130	443	94	127	453	913	xxxx	xxxxx	883	xxxx	xxxxx												
Volume/Cap:	0.36	0.02	0.09	0.07	0.01	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	171	xxxxx	xxxx	154	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	2.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	43.1	xxxxx	xxxxx	31.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	E	*	*	D	*	*	*	*	*	*	*												
ApproachDel:	43.1			31.0			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[20.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	25	2	33	6	1	6	4	591	20		17	572	8	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	25	2	33	6	1	6	4	591	20		17	572	8	
Added Vol:	8	0	0	0	0	0	0	12	6		0	15	0	
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1		0	0	0	
Initial Fut:	33	0	35	0	0	13	0	613	27		17	587	8	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86	0.86	
PHF Volume:	38	0	41	0	0	15	0	712	31		20	682	9	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	38	0	41	0	0	15	0	712	31		20	682	9	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1445	1443	712	1469	1465	682	xxxx	xxxx	xxxxx		743	xxxx	xxxxx	
Potent Cap.:	111	134	436	107	129	453	xxxx	xxxx	xxxxx		873	xxxx	xxxxx	
Move Cap.:	105	131	436	95	127	453	xxxx	xxxx	xxxxx		873	xxxx	xxxxx	
Total Cap:	234	256	xxxxx	216	247	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.16	0.00	0.09	0.00	0.00	0.03	xxxx	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*	
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT		LT - LTR		- RT	
Shared Cap.:	xxxx	308	xxxxx	xxxx	453	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	20.7	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	B	*	*	*	*		*	*	*	
ApproachDel:	20.7			13.2			xxxxxx				xxxxxx			
ApproachLOS:	C			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: E[46.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	28	0	18				5	2	8				10	673	52				38	572	6			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	28	0	18				5	2	8				10	673	52				38	572	6			
Added Vol:	11	0	0				0	0	0				0	23	11				0	23	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	39	0	18				5	2	8				10	696	63				38	595	6			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	40	0	18				5	2	8				10	706	64				39	604	6			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	40	0	18				5	2	8				10	706	64				39	604	6			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1416	1414	706				1449	1471	604				610	xxxx	xxxxx				770	xxxx	xxxxx			
Potent Cap.:	116	139	439				110	128	502				979	xxxx	xxxxx				853	xxxx	xxxxx			
Move Cap.:	108	131	439				101	121	502				979	xxxx	xxxxx				853	xxxx	xxxxx			
Volume/Cap:	0.37	0.00	0.04				0.05	0.02	0.02				0.01	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.7	xxxx	xxxxx				9.4	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		142	xxxxx			xxxx		183	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.8	xxxxx			xxxxx		0.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		46.9	xxxxx			xxxxx		26.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	46.9						26.4						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Existing With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[21.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	28	0	18	5	2	8	10	673	52	38	572	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	0	18	5	2	8	10	673	52	38	572	6
Added Vol:	11	0	0	0	0	0	0	23	11	0	23	0
PasserByVol:	0	0	0	-5	-2	7	-10	15	2	0	0	0
Initial Fut:	39	0	18	0	0	15	0	711	65	38	595	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	40	0	18	0	0	15	0	722	66	39	604	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	40	0	18	0	0	15	0	722	66	39	604	6
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1413	1409	722	1445	1468	604	xxxx	xxxx	xxxxx	787	xxxx	xxxxx
Potent Cap.:	117	140	430	111	129	502	xxxx	xxxx	xxxxx	841	xxxx	xxxxx
Move Cap.:	109	134	430	102	123	502	xxxx	xxxx	xxxxx	841	xxxx	xxxxx
Total Cap:	238	258	xxxxx	219	237	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.17	0.00	0.04	0.00	0.00	0.03	xxxx	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	277	xxxxx	xxxx	502	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	21.4	xxxxx	xxxxx	12.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	B	*	*	*	*	*	*	*
ApproachDel:	21.4			12.4			xxxxxx			xxxxxx		
ApproachLOS:	C			B			*			*		

Note: Queue reported is the number of cars per lane.

Opening Year (2017) Without Project

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	16	3	65	9	21	0	3	279	30	201	205	7
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	16	3	65	9	21	0	3	279	30	201	205	7
Added Vol:	0	0	3	0	0	0	0	6	0	2	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	3	68	9	21	0	3	285	30	203	210	7
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88	
PHF Volume:	18	3	78	10	24	0	3	326	34	232	240	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	3	78	10	24	0	3	326	34	232	240	8
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	18	3	78	10	24	0	3	326	34	232	240	8
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800	1800		1800 1800	1800		1800 1800	1800	
Adjustment:	0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00	
Lanes:	0.85 0.15	1.00		0.31 0.69	1.00		1.00 1.00	1.00		1.00 0.97	0.03	
Final Sat.:	1444 271	1800		531 1238	1800		1700 1800	1800		1700 1742	58	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.01	0.04		0.02 0.02	0.00		0.00 0.18	0.02		0.14 0.14	0.14	
Crit Moves:		****						****		****		
Green/Cycle:	0.11 0.11	0.11		0.11 0.11	0.00		0.01 0.45	0.45		0.34 0.78	0.78	
Volume/Cap:	0.12 0.12	0.40		0.18 0.18	0.00		0.18 0.40	0.04		0.40 0.18	0.18	
Delay/Veh:	24.5 24.5	26.3		24.8 24.8	0.0		33.7 11.3	9.2		15.6 1.7	1.7	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	24.5 24.5	26.3		24.8 24.8	0.0		33.7 11.3	9.2		15.6 1.7	1.7	
LOS by Move:	C C	C		C C	A		C	B		A B	A	
HCM2kAvgQ:	0 0	2		1 1	0		0	4		0 4	1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.445
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	19	9	43				12	6	2				3	265	24				240	289	18			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	19	9	43				12	6	2				3	265	24				240	289	18			
Added Vol:	0	0	5				0	0	0				0	16	0				5	17	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	19	9	48				12	6	2				3	281	24				245	306	18			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	23	11	59				15	7	2				4	344	29				300	374	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	23	11	59				15	7	2				4	344	29				300	374	22			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	23	11	59				15	7	2				4	344	29				300	374	22			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.69	0.31	1.00				0.68	0.32	1.00				1.00	1.00	1.00				1.00	0.94	0.06			
Final Sat.:	1175	556	1800				1155	577	1800				1700	1800	1800				1700	1700	100			
Capacity Analysis Module:																								
Vol/Sat:	0.02	0.02	0.03				0.01	0.01	0.00				0.00	0.19	0.02				0.18	0.22	0.22			
Crit Moves:			****											****					****					
Green/Cycle:	0.07	0.07	0.07				0.07	0.07	0.07				0.01	0.43	0.43				0.40	0.82	0.82			
Volume/Cap:	0.27	0.27	0.44				0.17	0.17	0.02				0.27	0.44	0.04				0.44	0.27	0.27			
Delay/Veh:	27.4	27.4	29.0				26.7	26.7	25.8				39.9	12.5	9.9				13.7	1.4	1.4			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	27.4	27.4	29.0				26.7	26.7	25.8				39.9	12.5	9.9				13.7	1.4	1.4			
LOS by Move:	C	C	C				C	C	C				D	B	A				B	A	A			
HCM2kAvgQ:	1	1	2				1	1	0				0	5	0				5	2	2			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.1]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1				1 0 2 0 1			
Volume Module:														
Base Vol:	40	5	43	14	3	17	17	300	38		26	418	31	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	40	5	43	14	3	17	17	300	38		26	418	31	
Added Vol:	0	0	0	0	0	0	0	9	0		0	7	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	40	5	43	14	3	17	17	309	38		26	425	31	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	49	6	53	17	4	21	21	380	47		32	522	38	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	49	6	53	17	4	21	21	380	47		32	522	38	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	748	1045	190	820	1054	261	560	xxxx	xxxxx		426	xxxx	xxxxx	
Potent Cap.:	305	231	826	270	228	744	1021	xxxx	xxxxx		1144	xxxx	xxxxx	
Move Cap.:	282	219	826	239	217	744	1021	xxxx	xxxxx		1144	xxxx	xxxxx	
Volume/Cap:	0.17	0.03	0.06	0.07	0.02	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	21.3	xxxx	xxxxx	8.6	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	406	xxxxx	xxxx	xxxx	545	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	17.1	xxxxx	xxxxx	xxxx	11.9	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	17.1			15.8			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0 2	0	1		1 0 2	0	1	
Volume Module:														
Base Vol:	40	5	43	14	3	17	17	300	38		26	418	31	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	40	5	43	14	3	17	17	300	38		26	418	31	
Added Vol:	0	0	0	0	0	0	0	9	0		0	7	0	
PasserByVol:	-40	-5	40	-14	-3	0	0	0	0		0	40	0	
Initial Fut:	0	0	83	0	0	17	17	309	38		26	465	31	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	102	0	0	21	21	380	47		32	571	38	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	102	0	0	21	21	380	47		32	571	38	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	771	1094	190	866	1103	286	609	xxxx	xxxxx		426	xxxx	xxxxx	
Potent Cap.:	293	216	826	250	213	717	979	xxxx	xxxxx		1144	xxxx	xxxxx	
Move Cap.:	274	205	826	211	203	717	979	xxxx	xxxxx		1144	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.12	0.00	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	826	xxxxx	xxxx	717	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.0	xxxxx	xxxxx	10.2	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	A	*	*	B	*	*	*	*		*	*	*	
ApproachDel:	10.0			10.2			xxxxxx				xxxxxx			
ApproachLOS:	A			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 7.5 Worst Case Level Of Service: D[34.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0 1		1 0	2	0	1
Volume Module:														
Base Vol:	89	28	81	26	38	29	30	259	36		56	461	92	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00			1.00 1.00	1.00		
Initial Bse:	89	28	81	26	38	29	30	259	36		56	461	92	
Added Vol:	0	0	0	0	0	0	0	21	0		0	22	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	89	28	81	26	38	29	30	280	36		56	483	92	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00			1.00 1.00	1.00		
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95			0.95 0.95	0.95		
PHF Volume:	94	30	86	27	40	31	32	296	38		59	510	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	94	30	86	27	40	31	32	296	38		59	510	97	
Critical Gap Module:														
Critical Gp:	7.5 6.5	6.9		7.5 6.5	6.9		4.1 xxxx	xxxxx			4.1 xxxx	xxxxx		
FollowUpTim:	3.5 4.0	3.3		3.5 4.0	3.3		2.2 xxxx	xxxxx			2.2 xxxx	xxxxx		
Capacity Module:														
Cnflict Vol:	752 1085	148		854 1025	255		607 xxxx	xxxxx			334 xxxx	xxxxx		
Potent Cap.:	302 219	879		255 237	750		981 xxxx	xxxxx			1237 xxxx	xxxxx		
Move Cap.:	235 201	879		193 218	750		981 xxxx	xxxxx			1237 xxxx	xxxxx		
Volume/Cap:	0.40 0.15	0.10		0.14 0.18	0.04		0.03 xxxx	xxxx			0.05 xxxx	xxxx		
Level Of Service Module:														
2Way95thQ:	xxxx xxxx	xxxxx		0.5 xxxx	xxxxx		0.1 xxxx	xxxxx			0.2 xxxx	xxxxx		
Control Del:	xxxxx xxxx	xxxxx		26.8 xxxx	xxxxx		8.8 xxxx	xxxxx			8.1 xxxx	xxxxx		
LOS by Move:	* *	*		D *	*		A *	*			A *	*		
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT			LT - LTR	- RT		
Shared Cap.:	xxxx 324	xxxxx		xxxx xxxx	315		xxxx xxxx	xxxxx			xxxx xxxx	xxxxx		
SharedQueue:	xxxxx 4.2	xxxxx		xxxxx xxxx	0.8		xxxxx xxxx	xxxxx			xxxxx xxxx	xxxxx		
Shrd ConDel:	xxxxx 34.2	xxxxx		xxxxx xxxx	19.7		xxxxx xxxx	xxxxx			xxxxx xxxx	xxxxx		
Shared LOS:	* D	*		* *	C		* *	*			* *	*		
ApproachDel:	34.2			21.7			xxxxxx				xxxxxx			
ApproachLOS:	D			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.4]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	89	28	81	26	38	29	30	259	36		56	461	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	89	28	81	26	38	29	30	259	36		56	461	92	
Added Vol:	0	0	0	0	0	0	0	21	0		0	22	0	
PasserByVol:	-89	-28	89	-26	-38	0	0	0	0		0	89	0	
Initial Fut:	0	0	170	0	0	29	30	280	36		56	572	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	180	0	0	31	32	296	38		59	604	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	180	0	0	31	32	296	38		59	604	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	779	1179	148	934	1119	302	701	xxxx	xxxxx		334	xxxx	xxxxx	
Potent Cap.:	289	192	879	224	208	700	905	xxxx	xxxxx		1237	xxxx	xxxxx	
Move Cap.:	259	177	879	167	191	700	905	xxxx	xxxxx		1237	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.20	0.00	0.00	0.04	0.03	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	879	xxxxx	xxxx	xxxx	700	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.4	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			10.4			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.371
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	28.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	68	112	123	116	96	90	49	272	42	142	385	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	112	123	116	96	90	49	272	42	142	385	33
Added Vol:	0	4	3	2	3	5	6	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	116	126	118	99	95	55	275	42	144	387	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	131	143	134	112	108	62	311	48	163	438	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	131	143	134	112	108	62	311	48	163	438	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	131	143	134	112	108	62	311	48	163	438	38
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3309	291
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.08	0.08	0.03	0.06	0.04	0.09	0.03	0.10	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.11	0.34	0.34	0.11	0.34	0.34	0.13	0.36	0.36
Volume/Cap:	0.42	0.11	0.24	0.72	0.09	0.18	0.32	0.26	0.08	0.72	0.37	0.37
Delay/Veh:	41.0	21.7	22.9	53.8	21.6	22.3	39.6	23.0	21.5	50.2	22.9	22.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.0	21.7	22.9	53.8	21.6	22.3	39.6	23.0	21.5	50.2	22.9	22.9
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	6	1	2	2	3	1	6	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.373
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	68	112	123		116	96	90		49	272	42		142	385	33	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	112	123		116	96	90		49	272	42		142	385	33	
Added Vol:	0	4	3		2	3	5		6	3	0		2	2	1	
PasserByVol:	0	5	0		10	5	0		38	-10	-2		0	0	0	
Initial Fut:	68	121	126		128	104	95		93	265	40		144	387	34	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	77	137	143		145	118	108		105	300	45		163	438	38	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	77	137	143		145	118	108		105	300	45		163	438	38	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	77	137	143		145	118	108		105	300	45		163	438	38	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.84	0.16	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3309	291	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.04	0.08		0.09	0.03	0.06		0.06	0.08	0.03		0.10	0.13	0.13	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.11	0.32	0.32		0.13	0.34	0.34		0.11	0.32	0.32		0.15	0.35	0.35	
Volume/Cap:	0.41	0.12	0.25		0.65	0.10	0.17		0.54	0.26	0.08		0.65	0.37	0.37	
Delay/Veh:	42.9	24.1	25.3		47.6	22.4	23.2		44.9	25.3	23.8		45.9	24.2	24.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	42.9	24.1	25.3		47.6	22.4	23.2		44.9	25.3	23.8		45.9	24.2	24.2	
LOS by Move:	D	C	C		D	C	C		D	C	C		D	C	C	
HCM2kAvgQ:	3	1	3		6	1	2		4	3	1		6	6	6	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.412
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	28.7
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	115	163	204	122	95	108	86	314	37	118	420	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	163	204	122	95	108	86	314	37	118	420	55
Added Vol:	0	11	5	3	11	17	16	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	174	209	125	106	125	102	319	37	123	425	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	187	224	134	114	134	109	342	40	132	456	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	187	224	134	114	134	109	342	40	132	456	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	187	224	134	114	134	109	342	40	132	456	62
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3168	432
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.12	0.08	0.03	0.07	0.06	0.10	0.02	0.08	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.65	0.15	0.36	0.73	0.09	0.22	0.58	0.27	0.06	0.71	0.42	0.42
Delay/Veh:	47.0	20.7	22.7	53.1	20.4	21.5	43.2	21.7	20.0	52.0	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.0	20.7	22.7	53.1	20.4	21.5	43.2	21.7	20.0	52.0	23.3	23.3
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	5	6	1	3	4	4	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	32.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	115	163	204	122	95	108	86	314	37	118	420	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	163	204	122	95	108	86	314	37	118	420	55
Added Vol:	0	11	5	3	11	17	16	5	0	5	5	3
PasserByVol:	0	28	0	19	43	0	84	-19	-2	0	0	0
Initial Fut:	115	202	209	144	149	125	186	300	35	123	425	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	217	224	154	160	134	200	322	38	132	456	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	217	224	154	160	134	200	322	38	132	456	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	217	224	154	160	134	200	322	38	132	456	62
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3168	432
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.12	0.09	0.04	0.07	0.12	0.09	0.02	0.08	0.14	0.14
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.16	0.36	0.36	0.11	0.31	0.31
Volume/Cap:	0.67	0.19	0.39	0.72	0.13	0.22	0.72	0.25	0.06	0.69	0.46	0.46
Delay/Veh:	51.7	24.7	26.8	53.0	23.0	23.9	48.4	22.5	20.9	52.8	28.1	28.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.7	24.7	26.8	53.0	23.0	23.9	48.4	22.5	20.9	52.8	28.1	28.1
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	5	6	2	3	8	3	1	6	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.368
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	65	294	150	17	196	65	33	46	30	85	92	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	294	150	17	196	65	33	46	30	85	92	24
Added Vol:	0	7	0	0	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	301	150	17	201	65	33	46	30	85	92	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	79	367	183	21	245	79	40	56	37	104	112	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	367	183	21	245	79	40	56	37	104	112	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	367	183	21	245	79	40	56	37	104	112	29
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.43	0.57	1.00	0.44	0.45	0.11
Final Sat.:	1700	1800	1800	1700	1800	1800	734	1023	1800	743	804	210
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.10	0.01	0.14	0.04	0.05	0.05	0.02	0.14	0.14	0.14
Crit Moves:		****									****	
Green/Cycle:	0.55	0.55	0.55	0.55	0.55	0.55	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.08	0.37	0.18	0.02	0.25	0.08	0.14	0.14	0.05	0.37	0.37	0.37
Delay/Veh:	6.3	7.7	6.7	6.0	7.0	6.3	12.3	12.3	11.8	13.8	13.8	13.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.3	7.7	6.7	6.0	7.0	6.3	12.3	12.3	11.8	13.8	13.8	13.8
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	4	2	0	2	1	1	1	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.392
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	56	424	226		19	102	99		28	37	19		51	52	38	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	56	424	226		19	102	99		28	37	19		51	52	38	
Added Vol:	0	15	0		0	16	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	56	439	226		19	118	99		28	37	19		51	52	38	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	63	496	256		21	133	112		32	42	21		58	59	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	63	496	256		21	133	112		32	42	21		58	59	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	63	496	256		21	133	112		32	42	21		58	59	43	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.44	0.56	1.00		0.38	0.36	0.26	
Final Sat.:	1700	1800	1800		1700	1800	1800		756	999	1800		637	650	475	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.28	0.14		0.01	0.07	0.06		0.04	0.04	0.01		0.09	0.09	0.09	
Crit Moves:		****												****		
Green/Cycle:	0.58	0.58	0.58		0.58	0.58	0.58		0.35	0.35	0.35		0.35	0.35	0.35	
Volume/Cap:	0.06	0.47	0.24		0.02	0.13	0.11		0.12	0.12	0.03		0.26	0.26	0.26	
Delay/Veh:	5.4	7.5	6.2		5.3	5.7	5.6		13.3	13.3	12.9		14.2	14.2	14.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	5.4	7.5	6.2		5.3	5.7	5.6		13.3	13.3	12.9		14.2	14.2	14.2	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	6	2		0	1	1		1	1	0		2	2	2	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[18.8]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 0 1				1 0 1 0 1			
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	465	2		10	646	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	465	2		10	646	1	
Added Vol:	0	0	0	4	0	3	4	8	0		0	11	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	473	2		10	657	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	579	2		12	804	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	579	2		12	804	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1422	1424	579	1421	1419	804	811	xxxx	xxxxx		581	xxxx	xxxxx	
Potent Cap.:	115	137	519	115	138	386	824	xxxx	xxxxx		1003	xxxx	xxxxx	
Move Cap.:	112	135	519	112	135	386	824	xxxx	xxxxx		1003	xxxx	xxxxx	
Total Cap:	237	255	xxxxx	238	256	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx		8.6	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	372	xxxxx	xxxx	273	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.0	xxxxx	xxxxx	18.8	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.0			18.8			xxxxxx				xxxxxx			
ApproachLOS:	B			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.0]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R		L	-	T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled					Uncontrolled				
Rights:	Include				Include				Include					Include				
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	1	0	1	1	0	1	0	1
Volume Module:																		
Base Vol:	10	0	8	7	0	2	3	706	3	14	551	4						
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	10	0	8	7	0	2	3	706	3	14	551	4						
Added Vol:	0	0	0	8	0	6	6	23	0	0	22	8						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	10	0	8	15	0	8	9	729	3	14	573	12						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94						
PHF Volume:	11	0	9	16	0	9	10	778	3	15	612	13						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	11	0	9	16	0	9	10	778	3	15	612	13						
Critical Gap Module:																		
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	1449	1452	778	1445	1442	612	624	xxxx	xxxxx	781	xxxx	xxxxx						
Potent Cap.:	110	132	400	111	134	497	967	xxxx	xxxxx	845	xxxx	xxxxx						
Move Cap.:	106	128	400	106	130	497	967	xxxx	xxxxx	845	xxxx	xxxxx						
Total Cap:	233	250	xxxxx	229	249	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	0.05	0.00	0.02	0.07	0.00	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	9.3	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*						
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT						
Shared Cap.:	xxxx	286	xxxxx	xxxx	282	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	18.5	xxxxx	xxxxx	19.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*						
ApproachDel:	18.5			19.0			xxxxxx			xxxxxx								
ApproachLOS:	C			C			*			*								

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: C[21.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	8	1	22				13	3	24				19	387	22				16	549	14			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	8	1	22				13	3	24				19	387	22				16	549	14			
Added Vol:	3	0	0				0	0	0				0	9	2				0	13	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	11	1	22				13	3	24				19	396	24				16	562	14			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89			
PHF Volume:	12	1	25				15	3	27				21	446	27				18	633	16			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	12	1	25				15	3	27				21	446	27				18	633	16			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1182	1174	446				1193	1194	641				649	xxxx	xxxxx				473	xxxx	xxxxx			
Potent Cap.:	168	193	616				165	188	478				946	xxxx	xxxxx				1099	xxxx	xxxxx			
Move Cap.:	152	186	616				153	181	478				946	xxxx	xxxxx				1099	xxxx	xxxxx			
Volume/Cap:	0.08	0.01	0.04				0.10	0.02	0.06				0.02	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.9	xxxx	xxxxx				8.3	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		300	xxxxx			xxxx		264	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.4	xxxxx			xxxxx		0.6	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		18.8	xxxxx			xxxxx		21.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	18.8						21.4						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: D[32.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	15	0	15				20	0	20				39	585	12				18	545	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	15	0	15				20	0	20				39	585	12				18	545	21			
Added Vol:	5	0	0				0	0	0				0	26	5				0	25	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	20	0	15				20	0	20				39	611	17				18	570	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	21	0	16				21	0	21				41	643	18				19	600	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	21	0	16				21	0	21				41	643	18				19	600	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1384	1385	643				1391	1392	611				622	xxxx	xxxxx				661	xxxx	xxxxx			
Potent Cap.:	122	145	477				121	143	497				969	xxxx	xxxxx				937	xxxx	xxxxx			
Move Cap.:	111	136	477				111	134	497				969	xxxx	xxxxx				937	xxxx	xxxxx			
Volume/Cap:	0.19	0.00	0.03				0.19	0.00	0.04				0.04	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.9	xxxx	xxxxx				8.9	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		166	xxxxx			xxxx		182	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.8	xxxxx			xxxxx		0.9	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		32.8	xxxxx			xxxxx		30.7	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		D	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	32.8						30.7						xxxxxx						xxxxxx					
ApproachLOS:	D						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.405
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	9		15		190		62		38		92		36		350		8		108		449		32	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	9		15		190		62		38		92		36		350		8		108		449		32	
Added Vol:	2		0		0		0		0		3		2		5		2		0		7		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	11		15		190		62		38		95		38		355		10		108		456		32	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	13		18		233		76		47		116		47		435		12		132		559		39	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	13		18		233		76		47		116		47		435		12		132		559		39	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	13		18		233		76		47		116		47		435		12		132		559		39	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.13		0.04		0.03		0.06		0.03		0.12		0.01		0.08		0.16		0.02	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.11		0.40		0.40		0.14		0.43		0.43	
Volume/Cap:	0.08		0.04		0.46		0.45		0.09		0.23		0.25		0.30		0.02		0.56		0.36		0.05	
Delay/Veh:	41.0		26.2		30.4		44.3		26.7		27.9		41.6		20.6		18.1		43.0		19.2		16.5	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.0		26.2		30.4		44.3		26.7		27.9		41.6		20.6		18.1		43.0		19.2		16.5	
LOS by Move:	D		C		C		D		C		C		D		C		B		D		B		B	
HCM2kAvgQ:	0		0		6		3		1		3		2		5		0		5		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.379
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	18		52		194		59		30		47		107		504		13		87		456		61	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	18		52		194		59		30		47		107		504		13		87		456		61	
Added Vol:	4		0		0		0		0		6		6		16		4		0		15		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	22		52		194		59		30		53		113		520		17		87		471		61	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	23		53		199		61		31		54		116		534		17		89		484		63	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	23		53		199		61		31		54		116		534		17		89		484		63	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	23		53		199		61		31		54		116		534		17		89		484		63	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.03		0.11		0.04		0.02		0.03		0.07		0.15		0.01		0.05		0.13		0.03	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.13		0.11		0.40		0.36		0.06		0.11		0.49		0.34		0.02		0.49		0.34		0.09	
Delay/Veh:	41.4		26.8		29.7		43.3		26.4		26.8		41.3		19.1		16.3		44.0		20.9		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.4		26.8		29.7		43.3		26.4		26.8		41.3		19.1		16.3		44.0		20.9		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		1		4		5		0		3		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[37.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25		2		33		6		1		6		4		602		20		18		591		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	25		2		33		6		1		6		4		602		20		18		591		8	
Added Vol:	0		0		0		0		0		0		0		5		0		0		7		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	25		2		33		6		1		6		4		607		20		18		598		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86	
PHF Volume:	29		2		38		7		1		7		5		705		23		21		695		9	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	29		2		38		7		1		7		5		705		23		21		695		9	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1459		1460		705		1483		1474		695		704		xxxx		xxxxx		728		xxxx		xxxxx	
Potent Cap.:	108		130		440		104		128		446		903		xxxx		xxxxx		885		xxxx		xxxxx	
Move Cap.:	104		127		440		92		124		446		903		xxxx		xxxxx		885		xxxx		xxxxx	
Volume/Cap:	0.28		0.02		0.09		0.08		0.01		0.02		0.01		xxxx		xxxx		0.02		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.0		xxxx		xxxxx		9.2		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		181		xxxxx		xxxx		150		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		1.7		xxxxx		xxxxx		0.3		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		37.0		xxxxx		xxxxx		31.7		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		E		*		*		D		*		*		*		*		*		*		*	
ApproachDel:	37.0						31.7						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[19.5]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled					Uncontrolled				
Rights:	Include				Include				Include					Include				
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																		
Base Vol:	25	2	33	6	1	6	4	602	20	18	591	8						
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	25	2	33	6	1	6	4	602	20	18	591	8						
Added Vol:	0	0	0	0	0	0	0	5	0	0	7	0						
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0						
Initial Fut:	25	0	35	0	0	13	0	617	21	18	598	8						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86						
PHF Volume:	29	0	41	0	0	15	0	717	24	21	695	9						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	29	0	41	0	0	15	0	717	24	21	695	9						
Critical Gap Module:																		
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	1465	1462	717	1485	1477	695	xxxx	xxxx	xxxxx	741	xxxx	xxxxx						
Potent Cap.:	107	130	433	104	127	446	xxxx	xxxx	xxxxx	875	xxxx	xxxxx						
Move Cap.:	102	127	433	92	124	446	xxxx	xxxx	xxxxx	875	xxxx	xxxxx						
Total Cap:	230	252	xxxxx	212	244	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	0.13	0.00	0.09	0.00	0.00	0.03	xxxx	xxxx	xxxx	0.02	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*						
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT		LT	-	LTR	-	RT
Shared Cap.:	xxxx		317	xxxxx	xxxx		446	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.8	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		19.5	xxxxx	xxxxx		13.4	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*	*		B	*	*	*	*			*	*	*		
ApproachDel:			19.5				13.4		xxxxxx					xxxxxx				
ApproachLOS:			C				B		*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: E[39.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 1! 0		0		0 0 1! 0		0		1 0 1 0		1		1 0 1 0		1	
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	683	53		38	580	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	20		7	2	11		10	683	53		38	580	8	
Added Vol:	0	0	0		0	0	0		0	16	0		0	15	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	30	0	20		7	2	11		10	699	53		38	595	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	30	0	20		7	2	11		10	709	54		39	604	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	30	0	20		7	2	11		10	709	54		39	604	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1421	1419	709		1448	1464	604		612	xxxx	xxxxx		763	xxxx	xxxxx	
Potent Cap.:	115	138	437		110	130	502		977	xxxx	xxxxx		859	xxxx	xxxxx	
Move Cap.:	106	130	437		101	122	502		977	xxxx	xxxxx		859	xxxx	xxxxx	
Volume/Cap:	0.29	0.00	0.05		0.07	0.02	0.02		0.01	xxxx	xxxx		0.04	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.7	xxxx	xxxxx		9.4	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	153	xxxxx		xxxx	186	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.4	xxxxx		xxxxx	0.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	39.9	xxxxx		xxxxx	26.7	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	39.9				26.7				xxxxxx				xxxxxx			
ApproachLOS:	E				D				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0		0	0	0 1! 0		0	0	1 0	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	683	53		38	580		8
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	30	0	20		7	2	11		10	683	53		38	580		8
Added Vol:	0	0	0		0	0	0		0	16	0		0	15		0
PasserByVol:	0	0	0		-7	-2	9		-10	17	2		0	0		0
Initial Fut:	30	0	20		0	0	20		0	716	55		38	595		8
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99		0.99
PHF Volume:	30	0	20		0	0	20		0	727	56		39	604		8
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
FinalVolume:	30	0	20		0	0	20		0	727	56		39	604		8
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1422	1416	727		1446	1463	604		xxxx	xxxx	xxxxx		782	xxxx	xxxxx	
Potent Cap.:	115	139	428		111	130	502		xxxx	xxxx	xxxxx		844	xxxx	xxxxx	
Move Cap.:	106	132	428		102	124	502		xxxx	xxxx	xxxxx		844	xxxx	xxxxx	
Total Cap:	235	257	xxxxx		218	238	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.13	0.00	0.05		0.00	0.00	0.04		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.5	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	287	xxxxx		xxxx	502	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.6	xxxxx		xxxxx	0.1	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	20.2	xxxxx		xxxxx	12.5	xxxxx		9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	B	*		A	*	*		*	*	*	
ApproachDel:	20.2				12.5				xxxxxx				xxxxxx			
ApproachLOS:	C				B				*				*			

Note: Queue reported is the number of cars per lane.

Opening Year (2017) With Project

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.403
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	1 0	0	1	0	1 0	0	1	1	0	1 0	1	1	0	0	1 0
Volume Module:																
Base Vol:	16	3	65		9	21	0		3	279	30		201	205		7
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	16	3	65		9	21	0		3	279	30		201	205		7
Added Vol:	0	0	5		0	0	0		0	6	0		3	5		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	16	3	70		9	21	0		3	285	30		204	210		7
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88		0.88
PHF Volume:	18	3	80		10	24	0		3	326	34		233	240		8
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	18	3	80		10	24	0		3	326	34		233	240		8
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	18	3	80		10	24	0		3	326	34		233	240		8
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800		1800
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00		1.00
Lanes:	0.85	0.15	1.00		0.31	0.69	1.00		1.00	1.00	1.00		1.00	0.97		0.03
Final Sat.:	1444	271	1800		531	1238	1800		1700	1800	1800		1700	1742		58
Capacity Analysis Module:																
Vol/Sat:	0.01	0.01	0.04		0.02	0.02	0.00		0.00	0.18	0.02		0.14	0.14		0.14
Crit Moves:			****							****			****			
Green/Cycle:	0.11	0.11	0.11		0.11	0.11	0.00		0.01	0.45	0.45		0.34	0.78		0.78
Volume/Cap:	0.11	0.11	0.40		0.18	0.18	0.00		0.18	0.40	0.04		0.40	0.18		0.18
Delay/Veh:	24.3	24.3	26.2		24.6	24.6	0.0		33.7	11.4	9.3		15.6	1.8		1.8
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:	24.3	24.3	26.2		24.6	24.6	0.0		33.7	11.4	9.3		15.6	1.8		1.8
LOS by Move:	C	C	C		C	C	A		C	B	A		B	A		A
HCM2kAvgQ:	0	0	2		1	1	0		0	4	0		4	1		1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	10.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	19	9	43	12	6	2	3	265	24	240	289	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	9	43	12	6	2	3	265	24	240	289	18
Added Vol:	0	0	7	0	0	0	0	16	0	8	17	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	9	50	12	6	2	3	281	24	248	306	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	23	11	61	15	7	2	4	344	29	304	374	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	11	61	15	7	2	4	344	29	304	374	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	11	61	15	7	2	4	344	29	304	374	22
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.69	0.31	1.00	0.68	0.32	1.00	1.00	1.00	1.00	1.00	0.94	0.06
Final Sat.:	1175	556	1800	1155	577	1800	1700	1800	1800	1700	1700	100
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.03	0.01	0.01	0.00	0.00	0.19	0.02	0.18	0.22	0.22
Crit Moves:			****					****		****		
Green/Cycle:	0.08	0.08	0.08	0.08	0.08	0.08	0.01	0.43	0.43	0.40	0.82	0.82
Volume/Cap:	0.26	0.26	0.45	0.17	0.17	0.02	0.27	0.45	0.04	0.45	0.27	0.27
Delay/Veh:	27.2	27.2	28.9	26.6	26.6	25.7	40.0	12.6	10.1	13.7	1.4	1.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.2	27.2	28.9	26.6	26.6	25.7	40.0	12.6	10.1	13.7	1.4	1.4
LOS by Move:	C	C	C	C	C	C	D	B	B	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.2]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	40	5	43	14	3	17	17	300	38	26	418	31								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	40	5	43	14	3	17	17	300	38	26	418	31								
Added Vol:	0	0	0	1	0	0	0	12	0	0	9	1								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	40	5	43	15	3	17	17	312	38	26	427	32								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	49	6	53	18	4	21	21	383	47	32	524	39								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	49	6	53	18	4	21	21	383	47	32	524	39								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	753	1053	192	825	1060	262	564	xxxx	xxxxx	430	xxxx	xxxxx								
Potent Cap.:	302	228	824	268	226	742	1018	xxxx	xxxxx	1140	xxxx	xxxxx								
Move Cap.:	279	217	824	237	215	742	1018	xxxx	xxxxx	1140	xxxx	xxxxx								
Volume/Cap:	0.18	0.03	0.06	0.08	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	21.5	xxxx	xxxxx	8.6	xxxx	xxxxx	8.2	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	403	xxxxx	xxxx	xxxx	543	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	17.2	xxxxx	xxxxx	xxxx	11.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*								
ApproachDel:	17.2			16.0			xxxxxx			xxxxxx										
ApproachLOS:	C			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.9]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0 2	0	1		1 0 2	0	1	
Volume Module:														
Base Vol:	40	5	43	14	3	17	17	300	38		26	418	31	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	40	5	43	14	3	17	17	300	38		26	418	31	
Added Vol:	0	0	0	1	0	0	0	12	0		0	9	1	
PasserByVol:	-40	-5	40	-14	-3	0	0	0	0		0	40	0	
Initial Fut:	0	0	83	1	0	17	17	312	38		26	467	32	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	102	1	0	21	21	383	47		32	574	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	102	1	0	21	21	383	47		32	574	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	776	1102	192	871	1109	287	613	xxxx	xxxxx		430	xxxx	xxxxx	
Potent Cap.:	291	213	824	248	211	716	976	xxxx	xxxxx		1140	xxxx	xxxxx	
Move Cap.:	272	203	824	210	201	716	976	xxxx	xxxxx		1140	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.12	0.01	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	824	xxxxx	xxxx	631	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.0	xxxxx	xxxxx	10.9	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	A	*	*	B	*	*	*	*		*	*	*	
ApproachDel:	10.0			10.9			xxxxxx				xxxxxx			
ApproachLOS:	A			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 7.7 Worst Case Level Of Service: E[35.4]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled					Uncontrolled				
Rights:	Include				Include				Include					Include				
Lanes:	0	0	1!	0 0	1	0	0	1 0	1	0	2	0	1	1	0	2	0	1
Volume Module:																		
Base Vol:	89	28	81		26	38	29		30	259	36			56	461	92		
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	89	28	81		26	38	29		30	259	36			56	461	92		
Added Vol:	0	0	0		3	0	0		0	26	0			0	28	3		
PasserByVol:	0	0	0		0	0	0		0	0	0			0	0	0		
Initial Fut:	89	28	81		29	38	29		30	285	36			56	489	95		
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	94	30	86		31	40	31		32	301	38			59	516	100		
Reduct Vol:	0	0	0		0	0	0		0	0	0			0	0	0		
FinalVolume:	94	30	86		31	40	31		32	301	38			59	516	100		
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																		
Cnflict Vol:	761	1099	150		863	1037	258		617	xxxx	xxxxx			339	xxxx	xxxxx		
Potent Cap.:	298	214	875		252	233	747		973	xxxx	xxxxx			1231	xxxx	xxxxx		
Move Cap.:	231	197	875		189	215	747		973	xxxx	xxxxx			1231	xxxx	xxxxx		
Volume/Cap:	0.41	0.15	0.10		0.16	0.19	0.04		0.03	xxxx	xxxx			0.05	xxxx	xxxx		
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx		0.6	xxxx	xxxxx		0.1	xxxx	xxxxx			0.2	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		27.7	xxxx	xxxxx		8.8	xxxx	xxxxx			8.1	xxxx	xxxxx		
LOS by Move:	*	*	*		D	*	*		A	*	*			A	*	*		
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		319	xxxxx	xxxx	xxxx		310	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		4.3	xxxxx	xxxxx	xxxx		0.9	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		35.4	xxxxx	xxxxx	xxxx		20.0	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		E	*	*	*		C	*	*	*			*	*	*		
ApproachDel:	35.4				22.3				xxxxxx					xxxxxx				
ApproachLOS:	E				C				*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[12.0]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	89	28	81	26	38	29	30	259	36		56	461	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	89	28	81	26	38	29	30	259	36		56	461	92	
Added Vol:	0	0	0	3	0	0	0	26	0		0	28	3	
PasserByVol:	-89	-28	89	-26	-38	0	0	0	0		0	89	0	
Initial Fut:	0	0	170	3	0	29	30	285	36		56	578	95	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	180	3	0	31	32	301	38		59	610	100	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	180	3	0	31	32	301	38		59	610	100	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	788	1193	150	943	1131	305	711	xxxx	xxxxx		339	xxxx	xxxxx	
Potent Cap.:	285	188	875	220	205	697	898	xxxx	xxxxx		1231	xxxx	xxxxx	
Move Cap.:	256	173	875	164	188	697	898	xxxx	xxxxx		1231	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.02	0.00	0.04	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	27.3	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	875	xxxxx	xxxx	xxxx	697	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.2	xxxxx	xxxxx	xxxx	10.4	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.2			12.0			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.380
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 29.5
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2 0	1		1 0	2 0	1		1 0	2 0	1		1 0	1 1	0	
Volume Module:																
Base Vol:	68	112	123		116	96	90		49	272	42		142	385	33	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	112	123		116	96	90		49	272	42		142	385	33	
Added Vol:	0	4	9		5	3	5		6	7	0		6	5	3	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	68	116	132		121	99	95		55	279	42		148	390	36	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	77	131	149		137	112	108		62	316	48		167	441	41	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	77	131	149		137	112	108		62	316	48		167	441	41	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	77	131	149		137	112	108		62	316	48		167	441	41	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.83	0.17	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3296	304	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.04	0.08		0.08	0.03	0.06		0.04	0.09	0.03		0.10	0.13	0.13	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.11	0.32	0.32		0.13	0.34	0.34		0.12	0.32	0.32		0.15	0.36	0.36	
Volume/Cap:	0.42	0.11	0.26		0.64	0.09	0.18		0.32	0.27	0.08		0.64	0.37	0.37	
Delay/Veh:	43.1	24.0	25.5		47.9	22.7	23.5		41.5	25.5	23.8		44.9	23.9	23.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	43.1	24.0	25.5		47.9	22.7	23.5		41.5	25.5	23.8		44.9	23.9	23.9	
LOS by Move:	D	C	C		D	C	C		D	C	C		D	C	C	
HCM2kAvgQ:	3	1	3		5	1	2		2	4	1		6	6	6	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.384
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	68	112	123	116	96	90	49	272	42	142	385	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	112	123	116	96	90	49	272	42	142	385	33
Added Vol:	0	4	9	5	3	5	6	7	0	6	5	3
PasserByVol:	0	5	0	10	5	0	38	-10	-2	0	0	0
Initial Fut:	68	121	132	131	104	95	93	269	40	148	390	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	137	149	148	118	108	105	304	45	167	441	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	137	149	148	118	108	105	304	45	167	441	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	137	149	148	118	108	105	304	45	167	441	41
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3296	304
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.08	0.09	0.03	0.06	0.06	0.08	0.03	0.10	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.11	0.32	0.32	0.15	0.35	0.35
Volume/Cap:	0.41	0.12	0.26	0.66	0.10	0.17	0.54	0.26	0.08	0.66	0.38	0.38
Delay/Veh:	42.9	24.1	25.5	48.6	22.5	23.2	44.9	25.4	23.8	46.7	24.3	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.9	24.1	25.5	48.6	22.5	23.2	44.9	25.4	23.8	46.7	24.3	24.3
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	6	1	2	4	3	1	6	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.431
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 29.3
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2 0	1		1 0	2 0	1		1 0	2 0	1		1 0	1 1	0	
Volume Module:																
Base Vol:	115	163	204		122	95	108		86	314	37		118	420	55	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	115	163	204		122	95	108		86	314	37		118	420	55	
Added Vol:	0	11	15		8	11	17		16	13	0		16	13	9	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	115	174	219		130	106	125		102	327	37		134	433	64	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	123	187	235		139	114	134		109	351	40		144	464	69	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	123	187	235		139	114	134		109	351	40		144	464	69	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	123	187	235		139	114	134		109	351	40		144	464	69	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.74	0.26	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3136	464	
Capacity Analysis Module:																
Vol/Sat:	0.07	0.05	0.13		0.08	0.03	0.07		0.06	0.10	0.02		0.08	0.15	0.15	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.11	0.34	0.34		0.12	0.34	0.34		0.11	0.34	0.34		0.12	0.35	0.35	
Volume/Cap:	0.65	0.15	0.39		0.69	0.09	0.22		0.57	0.29	0.07		0.69	0.43	0.43	
Delay/Veh:	48.3	22.1	24.4		49.7	21.1	22.2		44.2	23.3	21.4		49.2	24.0	24.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	48.3	22.1	24.4		49.7	21.1	22.2		44.2	23.3	21.4		49.2	24.0	24.0	
LOS by Move:	D	C	C		D	C	C		D	C	C		D	C	C	
HCM2kAvgQ:	5	2	5		6	1	3		4	4	1		6	6	6	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.533
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	33.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	115	163	204	122	95	108	86	314	37	118	420	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	163	204	122	95	108	86	314	37	118	420	55
Added Vol:	0	11	15	8	11	17	16	13	0	16	13	9
PasserByVol:	0	28	0	19	43	0	84	-19	-2	0	0	0
Initial Fut:	115	202	219	149	149	125	186	308	35	134	433	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	217	235	160	160	134	200	330	38	144	464	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	217	235	160	160	134	200	330	38	144	464	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	217	235	160	160	134	200	330	38	144	464	69
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.74	0.26
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3136	464
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.09	0.04	0.07	0.12	0.09	0.02	0.08	0.15	0.15
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.16	0.36	0.36	0.11	0.31	0.31
Volume/Cap:	0.66	0.19	0.41	0.73	0.13	0.22	0.73	0.26	0.06	0.75	0.48	0.48
Delay/Veh:	51.4	24.7	27.1	53.6	22.9	23.8	49.4	22.7	21.0	58.7	28.3	28.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.4	24.7	27.1	53.6	22.9	23.8	49.4	22.7	21.0	58.7	28.3	28.3
LOS by Move:	D	C	C	D	C	C	D	C	C	E	C	C
HCM2kAvgQ:	5	2	6	7	2	3	8	4	1	6	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.370
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	65 294 150			17 196 65			33 46 30			85 92 24		
Growth Adj:	1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00		
Initial Bse:	65 294 150			17 196 65			33 46 30			85 92 24		
Added Vol:	0 10 0			0 7 2			3 0 0			0 0 0		
PasserByVol:	0 0 0			0 0 0			0 0 0			0 0 0		
Initial Fut:	65 304 150			17 203 67			36 46 30			85 92 24		
User Adj:	1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00		
PHF Adj:	0.82 0.82 0.82			0.82 0.82 0.82			0.82 0.82 0.82			0.82 0.82 0.82		
PHF Volume:	79 371 183			21 248 82			44 56 37			104 112 29		
Reduct Vol:	0 0 0			0 0 0			0 0 0			0 0 0		
Reduced Vol:	79 371 183			21 248 82			44 56 37			104 112 29		
PCE Adj:	1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00		
MLF Adj:	1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00		
FinalVolume:	79 371 183			21 248 82			44 56 37			104 112 29		
Saturation Flow Module:												
Sat/Lane:	1800 1800 1800			1800 1800 1800			1800 1800 1800			1800 1800 1800		
Adjustment:	0.94 1.00 1.00			0.94 1.00 1.00			0.94 1.00 1.00			0.94 1.00 1.00		
Lanes:	1.00 1.00 1.00			1.00 1.00 1.00			0.45 0.55 1.00			0.44 0.45 0.11		
Final Sat.:	1700 1800 1800			1700 1800 1800			770 984 1800			743 804 210		
Capacity Analysis Module:												
Vol/Sat:	0.05 0.21 0.10			0.01 0.14 0.05			0.06 0.06 0.02			0.14 0.14 0.14		
Crit Moves:	****									****		
Green/Cycle:	0.56 0.56 0.56			0.56 0.56 0.56			0.38 0.38 0.38			0.38 0.38 0.38		
Volume/Cap:	0.08 0.37 0.18			0.02 0.25 0.08			0.15 0.15 0.05			0.37 0.37 0.37		
Delay/Veh:	6.2 7.7 6.7			6.0 7.0 6.2			12.5 12.5 11.9			13.9 13.9 13.9		
User DelAdj:	1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00			1.00 1.00 1.00		
AdjDel/Veh:	6.2 7.7 6.7			6.0 7.0 6.2			12.5 12.5 11.9			13.9 13.9 13.9		
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	4	2	0	2	1	1	1	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	56	424	226	19	102	99	28	37	19	51	52	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	424	226	19	102	99	28	37	19	51	52	38
Added Vol:	0	21	0	0	22	6	5	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	445	226	19	124	105	33	37	19	51	52	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	63	503	256	21	140	119	37	42	21	58	59	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	503	256	21	140	119	37	42	21	58	59	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	503	256	21	140	119	37	42	21	58	59	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.49	0.51	1.00	0.38	0.36	0.26
Final Sat.:	1700	1800	1800	1700	1800	1800	826	926	1800	637	650	475
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.14	0.01	0.08	0.07	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.06	0.48	0.24	0.02	0.13	0.11	0.13	0.13	0.03	0.26	0.26	0.26
Delay/Veh:	5.4	7.6	6.2	5.3	5.7	5.6	13.4	13.4	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.6	6.2	5.3	5.7	5.6	13.4	13.4	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[19.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	3	0	6				2	0	0				0	465	2				10	646	1			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	3	0	6				2	0	0				0	465	2				10	646	1			
Added Vol:	3	0	2				4	0	3				4	15	6				6	15	5			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	6	0	8				6	0	3				4	480	8				16	661	6			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	7	0	10				7	0	4				5	587	10				20	809	7			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	7	0	10				7	0	4				5	587	10				20	809	7			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1450	1452	587				1454	1454	809				816	xxxx	xxxxx				597	xxxx	xxxxx			
Potent Cap.:	110	132	513				109	131	384				821	xxxx	xxxxx				990	xxxx	xxxxx			
Move Cap.:	107	128	513				105	128	384				821	xxxx	xxxxx				990	xxxx	xxxxx			
Total Cap:	230	248	xxxxx				228	247	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.03	0.00	0.02				0.03	0.00	0.01				0.01	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.4	xxxx	xxxxx				8.7	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		336	xxxxx			xxxx		264	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.2	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		16.3	xxxxx	xxxxx		19.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Shared LOS:	*		C	*	*		C	*	*	*	*	*	*	*	*	*	*							
ApproachDel:	16.3						19.2						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10	0	8				7	0	2				3	706	3				14	551	4			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	10	0	8				7	0	2				3	706	3				14	551	4			
Added Vol:	12	0	6				8	0	6				6	37	11				11	37	8			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	22	0	14				15	0	8				9	743	14				25	588	12			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94			
PHF Volume:	23	0	15				16	0	9				10	793	15				27	628	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	23	0	15				16	0	9				10	793	15				27	628	13			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1504	1506	793				1508	1508	628				640	xxxx	xxxxx				808	xxxx	xxxxx			
Potent Cap.:	101	122	392				100	122	487				954	xxxx	xxxxx				826	xxxx	xxxxx			
Move Cap.:	96	117	392				93	117	487				954	xxxx	xxxxx				826	xxxx	xxxxx			
Total Cap:	221	239	xxxxx				210	233	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.11	0.00	0.04				0.08	0.00	0.02				0.01	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	xxxxx				9.5	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		266	xxxxx			xxxx		262	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.5	xxxxx			xxxxx		0.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		20.8	xxxxx			xxxxx		20.2	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	20.8						20.2						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	425	0	0	570	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	425	0	0	570	0
Added Vol:	4	0	3	0	0	0	0	13	7	6	21	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	0	3	0	0	0	0	438	7	6	591	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	5	0	3	0	0	0	0	498	8	7	672	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	3	0	0	0	0	498	8	7	672	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1184	1184	498	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	506	xxxx	xxxxx
Potent Cap.:	211	191	576	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1069	xxxx	xxxxx
Move Cap.:	210	190	576	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1069	xxxx	xxxxx
Total Cap:	346	310	xxxxx	295	307	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	418	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	13.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		13.8		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[17.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	640	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	640	0	0	580	0
Added Vol:	15	0	12	0	0	0	0	37	13	11	40	0
PasserByVol:	14	0	2	0	0	0	0	0	13	1	0	0
Initial Fut:	29	0	14	0	0	0	0	677	26	12	620	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	31	0	15	0	0	0	0	716	28	13	656	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	31	0	15	0	0	0	0	716	28	13	656	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1397	1397	716	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	744	xxxx	xxxxx
Potent Cap.:	157	142	433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	873	xxxx	xxxxx
Move Cap.:	155	140	433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	873	xxxx	xxxxx
Total Cap:	296	266	xxxxx	237	257	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.10	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	330	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	17.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	17.6			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: C[21.8]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		0 0 1! 0	0		1 0	1	0	1	1 0	0	1	0
Volume Module:														
Base Vol:	8	1	22	13	3	24	19	387	22		16	549	14	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	8	1	22	13	3	24	19	387	22		16	549	14	
Added Vol:	3	0	2	0	0	1	1	13	2		0	22	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	11	1	24	13	3	25	20	400	24		16	571	14	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	12	1	27	15	3	28	23	451	27		18	644	16	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	12	1	27	15	3	28	23	451	27		18	644	16	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1199	1191	451	1211	1210	651	659	xxxx	xxxxx		478	xxxx	xxxxx	
Potent Cap.:	164	189	613	161	184	472	938	xxxx	xxxxx		1095	xxxx	xxxxx	
Move Cap.:	147	181	613	148	177	472	938	xxxx	xxxxx		1095	xxxx	xxxxx	
Volume/Cap:	0.08	0.01	0.04	0.10	0.02	0.06	0.02	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	301	xxxxx	xxxx	260	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	18.8	xxxxx	xxxxx	21.8	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	18.8			21.8			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: D[34.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	15	0	15				20	0	20				39	585	12				18	545	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	15	0	15				20	0	20				39	585	12				18	545	21			
Added Vol:	5	0	6				0	0	3				3	41	5				0	44	0			
PasserByVol:	0	0	0				0	0	1				2	0	12				11	0	0			
Initial Fut:	20	0	21				20	0	24				44	626	29				29	589	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	21	0	22				21	0	25				46	659	31				31	620	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	21	0	22				21	0	25				46	659	31				31	620	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1456	1454	659				1459	1463	620				642	xxxx	xxxxx				689	xxxx	xxxxx			
Potent Cap.:	109	131	467				108	130	492				952	xxxx	xxxxx				915	xxxx	xxxxx			
Move Cap.:	97	121	467				97	119	492				952	xxxx	xxxxx				915	xxxx	xxxxx			
Volume/Cap:	0.22	0.00	0.05				0.22	0.00	0.05				0.05	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.1	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		163	xxxxx			xxxx		172	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.0	xxxxx			xxxxx		1.0	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		34.8	xxxxx			xxxxx		33.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		D	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	34.8						33.4						xxxxxx						xxxxxx					
ApproachLOS:	D						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[8.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 1	0 0		0 0 1!	0 0		0 0 0	0 0	
Volume Module:												
Base Vol:	0 30	0		0 40	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 30	0		0 40	0		0 0	0		0 0	0	
Added Vol:	4 3	0		0 2	0		2 0	3		0 0	0	
PasserByVol:	0 0	0		0 0	0		0 0	0		0 0	0	
Initial Fut:	4 33	0		0 42	0		2 0	3		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.81 0.81	0.81		0.81 0.81	0.81		0.81 0.81	0.81		0.81 0.81	0.81	
PHF Volume:	5 41	0		0 52	0		2 0	4		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	5 41	0		0 52	0		2 0	4		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		6.4 6.5	6.2		xxxxx xxxx	xxxxx	
FollowUpTim:	2.2 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		3.5 4.0	3.3		xxxxx xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	52 xxxx xxxxx	xxxx		xxxx xxxxx	xxxxx		103 103	52		xxxx xxxx	xxxxx	
Potent Cap.:	1567 xxxx xxxxx	xxxx		xxxx xxxxx	xxxxx		901 791	1022		xxxx xxxx	xxxxx	
Move Cap.:	1567 xxxx xxxxx	xxxx		xxxx xxxxx	xxxxx		898 789	1022		xxxx xxxx	xxxxx	
Volume/Cap:	0.00 xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.00 0.00	0.00		xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx	xxxx		xxxx xxxxx	xxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
Control Del:	7.3 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
LOS by Move:	A *	*		* *	*		* *	*		* *	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx 968	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.0 xxxx xxxxx	xxxxx		xxxx xxxx xxxxx	xxxxx		0.0 xxxxx	xxxxx		xxxx xxxx	xxxxx	
Shrd ConDel:	7.3 xxxx xxxxx	xxxxx		xxxx xxxx xxxxx	xxxxx		8.7 xxxxx	xxxxx		xxxx xxxx	xxxxx	
Shared LOS:	A *	*		* *	*		* A	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			8.7			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: A[9.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0 0		0 0 0	0 0	
Volume Module:												
Base Vol:	0 30	0		0 30	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 30	0		0 30	0		0 0	0		0 0	0	
Added Vol:	8 5	0		0 5	0		6 0	9		0 0	0	
PasserByVol:	4 0	0		0 0	13		13 0	5		0 0	0	
Initial Fut:	12 35	0		0 35	13		19 0	14		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85	
PHF Volume:	14 41	0		0 41	15		22 0	16		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	14 41	0		0 41	15		22 0	16		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		6.4 6.5	6.2		xxxxx xxxx	xxxxx	
FollowUpTim:	2.2 xxxx	xxxxx		xxxxx xxxx	xxxxx		3.5 4.0	3.3		xxxxx xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	56 xxxx	xxxxx		xxxx xxxx	xxxxx		118 118	49		xxxx xxxx	xxxxx	
Potent Cap.:	1561 xxxx	xxxxx		xxxx xxxx	xxxxx		882 776	1026		xxxx xxxx	xxxxx	
Move Cap.:	1561 xxxx	xxxxx		xxxx xxxx	xxxxx		876 769	1026		xxxx xxxx	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.03 0.00	0.02		xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
Control Del:	7.3 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	
LOS by Move:	A	*		* *	*		* *	*		* *	*	
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx 934	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx 0.1	xxxxx		xxxxx xxxx	xxxxx	
Shrd ConDel:	7.3 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx 9.0	xxxxx		xxxxx xxxx	xxxxx	
Shared LOS:	A	*		* *	*		* A	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			9.0			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.406
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	9		15		190		62		38		92		36		350		8		108		449		32	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	9		15		190		62		38		92		36		350		8		108		449		32	
Added Vol:	4		0		0		0		0		7		5		8		2		0		12		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	13		15		190		62		38		99		41		358		10		108		461		32	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	16		18		233		76		47		121		50		439		12		132		565		39	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	16		18		233		76		47		121		50		439		12		132		565		39	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	16		18		233		76		47		121		50		439		12		132		565		39	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.13		0.04		0.03		0.07		0.03		0.12		0.01		0.08		0.16		0.02	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.11		0.40		0.40		0.14		0.43		0.43	
Volume/Cap:	0.09		0.04		0.46		0.45		0.09		0.24		0.27		0.30		0.02		0.56		0.36		0.05	
Delay/Veh:	41.1		26.2		30.4		44.3		26.7		28.0		41.8		20.6		18.1		43.0		19.3		16.5	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.1		26.2		30.4		44.3		26.7		28.0		41.8		20.6		18.1		43.0		19.3		16.5	
LOS by Move:	D		C		C		D		C		C		D		C		B		D		B		B	
HCM2kAvgQ:	1		0		6		3		1		3		2		5		0		5		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.388
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	18	52	194	59	30	47	107	504	13	87	456	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	52	194	59	30	47	107	504	13	87	456	61
Added Vol:	7	0	0	0	0	14	15	25	7	0	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	52	194	59	30	61	122	529	20	87	479	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	26	53	199	61	31	63	125	543	21	89	492	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	53	199	61	31	63	125	543	21	89	492	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	53	199	61	31	63	125	543	21	89	492	63
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.03	0.07	0.15	0.01	0.05	0.14	0.03
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.15	0.11	0.40	0.36	0.06	0.12	0.53	0.35	0.03	0.49	0.34	0.09
Delay/Veh:	41.5	26.8	29.7	43.3	26.4	27.0	42.1	19.1	16.3	44.0	21.0	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.5	26.8	29.7	43.3	26.4	27.0	42.1	19.1	16.3	44.0	21.0	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	1	4	6	0	3	5	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: E[38.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25		2		33		6		1		6		4		602		20		18		591		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	25		2		33		6		1		6		4		602		20		18		591		8	
Added Vol:	1		0		0		0		0		0		0		7		1		0		10		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	26		2		33		6		1		6		4		609		21		18		601		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86	
PHF Volume:	30		2		38		7		1		7		5		707		24		21		698		9	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	30		2		38		7		1		7		5		707		24		21		698		9	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1465		1466		707		1489		1481		698		707		xxxx		xxxxx		732		xxxx		xxxxx	
Potent Cap.:	107		129		438		103		127		444		901		xxxx		xxxxx		882		xxxx		xxxxx	
Move Cap.:	103		126		438		91		123		444		901		xxxx		xxxxx		882		xxxx		xxxxx	
Volume/Cap:	0.29		0.02		0.09		0.08		0.01		0.02		0.01		xxxx		xxxx		0.02		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.0		xxxx		xxxxx		9.2		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		177		xxxxx		xxxx		148		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		1.8		xxxxx		xxxxx		0.3		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		38.3		xxxxx		xxxxx		32.0		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		E		*		*		D		*		*		*		*		*		*		*	
ApproachDel:	38.3						32.0						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[19.8]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	25	2	33	6	1	6	4	602	20	18	591	8								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	25	2	33	6	1	6	4	602	20	18	591	8								
Added Vol:	1	0	0	0	0	0	0	7	1	0	10	0								
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0								
Initial Fut:	26	0	35	0	0	13	0	619	22	18	601	8								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86								
PHF Volume:	30	0	41	0	0	15	0	719	26	21	698	9								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	30	0	41	0	0	15	0	719	26	21	698	9								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1471	1468	719	1492	1484	698	xxxx	xxxx	xxxxx	744	xxxx	xxxxx								
Potent Cap.:	106	129	432	103	126	444	xxxx	xxxx	xxxxx	872	xxxx	xxxxx								
Move Cap.:	101	126	432	91	123	444	xxxx	xxxx	xxxxx	872	xxxx	xxxxx								
Total Cap:	229	251	xxxxx	211	243	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.13	0.00	0.09	0.00	0.00	0.03	xxxx	xxxx	xxxx	0.02	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		314	xxxxx		xxxx		444	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.9	xxxxx		xxxxx		0.1	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		19.8	xxxxx		xxxxx		13.4	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		B	*		*	*	*			*	*	*		
ApproachDel:	19.8					13.4					xxxxxx					xxxxxx				
ApproachLOS:	C					B					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: E[43.3]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	30	0	20			7	2	11			10	683	53			38	580	8		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	30	0	20			7	2	11			10	683	53			38	580	8		
Added Vol:	3	0	0			0	0	0			0	22	3			0	21	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	33	0	20			7	2	11			10	705	56			38	601	8		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.99	0.99	0.99			0.99	0.99	0.99			0.99	0.99	0.99			0.99	0.99	0.99		
PHF Volume:	33	0	20			7	2	11			10	715	57			39	610	8		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	33	0	20			7	2	11			10	715	57			39	610	8		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1433	1431	715			1461	1480	610			618	xxxx	xxxxx			772	xxxx	xxxxx		
Potent Cap.:	113	136	434			108	127	498			972	xxxx	xxxxx			852	xxxx	xxxxx		
Move Cap.:	104	128	434			99	120	498			972	xxxx	xxxxx			852	xxxx	xxxxx		
Volume/Cap:	0.32	0.00	0.05			0.07	0.02	0.02			0.01	xxxx	xxxx			0.05	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.7	xxxx	xxxxx			9.4	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		146	xxxxx		xxxx		182	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		1.5	xxxxx		xxxxx		0.4	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		43.3	xxxxx		xxxxx		27.2	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*		E	*		*		D	*		*	*	*			*	*	*		
ApproachDel:	43.3					27.2					xxxxxx					xxxxxx				
ApproachLOS:	E					D					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2017) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.9]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	0 1	0	0	1	1	0	1	0 1
Volume Module:														
Base Vol:	30	0	20	7	2	11	10	683	53		38	580		8
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00			1.00 1.00	1.00		
Initial Bse:	30	0	20	7	2	11	10	683	53		38	580		8
Added Vol:	3	0	0	0	0	0	0	22	3		0	21		0
PasserByVol:	0	0	0	-7	-2	9	-10	17	2		0	0		0
Initial Fut:	33	0	20	0	0	20	0	722	58		38	601		8
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00			1.00 1.00	1.00		
PHF Adj:	0.99 0.99	0.99		0.99 0.99	0.99		0.99 0.99	0.99			0.99 0.99	0.99		
PHF Volume:	33	0	20	0	0	20	0	733	59		39	610		8
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0		0
FinalVolume:	33	0	20	0	0	20	0	733	59		39	610		8
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1434	1428	733	1459	1479	610	xxxx	xxxx	xxxxx		792	xxxx	xxxxx	
Potent Cap.:	113	136	424	108	127	498	xxxx	xxxx	xxxxx		838	xxxx	xxxxx	
Move Cap.:	104	130	424	99	121	498	xxxx	xxxx	xxxxx		838	xxxx	xxxxx	
Total Cap:	233	255	xxxxx	216	235	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.14 0.00	0.05		0.00 0.00	0.04		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.5	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*	
Movement:	LT - LTR	-	RT	LT - LTR	-	RT	LT - LTR	-	RT		LT - LTR	-	RT	
Shared Cap.:	xxxx	280	xxxxx	xxxx	498	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	20.9	xxxxx	xxxxx	12.5	xxxxx	9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	B	*	A	*	*		*	*	*	
ApproachDel:	20.9			12.5			xxxxxx				xxxxxx			
ApproachLOS:	C			B			*				*			

Note: Queue reported is the number of cars per lane.

Opening Year (2018) Without Project

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	11.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	16	4	65	9	20	0	4	279	30	202	216	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	4	65	9	20	0	4	279	30	202	216	11
Added Vol:	0	0	3	0	0	0	0	12	0	2	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	4	68	9	20	0	4	291	30	204	226	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	5	78	10	23	0	5	333	34	233	258	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	5	78	10	23	0	5	333	34	233	258	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	5	78	10	23	0	5	333	34	233	258	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.81	0.19	1.00	0.32	0.68	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1375	344	1800	549	1219	1800	1700	1800	1800	1700	1716	84
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.04	0.02	0.02	0.00	0.00	0.18	0.02	0.14	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.11	0.11	0.11	0.11	0.11	0.00	0.01	0.46	0.46	0.34	0.78	0.78
Volume/Cap:	0.12	0.12	0.41	0.18	0.18	0.00	0.19	0.41	0.04	0.41	0.19	0.19
Delay/Veh:	24.6	24.6	26.4	24.9	24.9	0.0	33.2	11.2	9.1	15.7	1.8	1.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	24.6	26.4	24.9	24.9	0.0	33.2	11.2	9.1	15.7	1.8	1.8
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.457
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	1 0	0	1	0	1 0	0	1	1	0	1 0	1	1	0	0 1	0
Volume Module:																
Base Vol:	19	9	43		12	6	2		3	265	24		240	289	18	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	19	9	43		12	6	2		3	265	24		240	289	18	
Added Vol:	0	0	5		0	0	0		0	32	0		5	34	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	19	9	48		12	6	2		3	297	24		245	323	18	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	23	11	59		15	7	2		4	363	29		300	395	22	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	23	11	59		15	7	2		4	363	29		300	395	22	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	23	11	59		15	7	2		4	363	29		300	395	22	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	0.69	0.31	1.00		0.68	0.32	1.00		1.00	1.00	1.00		1.00	0.95	0.05	
Final Sat.:	1175	556	1800		1155	577	1800		1700	1800	1800		1700	1705	95	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.03		0.01	0.01	0.00		0.00	0.20	0.02		0.18	0.23	0.23	
Crit Moves:			****							****			****			
Green/Cycle:	0.07	0.07	0.07		0.07	0.07	0.07		0.01	0.44	0.44		0.39	0.82	0.82	
Volume/Cap:	0.28	0.28	0.46		0.18	0.18	0.02		0.28	0.46	0.04		0.46	0.28	0.28	
Delay/Veh:	27.6	27.6	29.3		26.9	26.9	26.0		41.2	12.1	9.5		14.2	1.4	1.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	27.6	27.6	29.3		26.9	26.9	26.0		41.2	12.1	9.5		14.2	1.4	1.4	
LOS by Move:	C	C	C		C	C	C		D	B	A		B	A	A	
HCM2kAvgQ:	1	1	2		1	1	0		0	5	0		5	2	2	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	43	14	3	17	17	310	39		26	416	31	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43	14	3	17	17	310	39		26	416	31	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	41	5	43	14	3	17	17	325	39		26	428	31	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	50	6	53	17	4	21	21	399	48		32	526	38	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	50	6	53	17	4	21	21	399	48		32	526	38	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	769	1069	200	834	1078	263	564	xxxx	xxxxx		447	xxxx	xxxxx	
Potent Cap.:	294	223	814	264	220	742	1018	xxxx	xxxxx		1124	xxxx	xxxxx	
Move Cap.:	272	213	814	233	210	742	1018	xxxx	xxxxx		1124	xxxx	xxxxx	
Volume/Cap:	0.19	0.03	0.06	0.07	0.02	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	21.7	xxxx	xxxxx	8.6	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	392	xxxxx	xxxx	xxxx	537	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	17.7	xxxxx	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	17.7			16.0			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 1!	0	0		0 0 1!	0	0		1 0 2	0	1		1 0 2	0	1	
Volume Module:																
Base Vol:	41	5	43		14	3	17		17	310	39		26	416	31	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43		14	3	17		17	310	39		26	416	31	
Added Vol:	0	0	0		0	0	0		0	15	0		0	12	0	
PasserByVol:	-41	-5	41		-14	-3	0		0	0	0		0	41	0	
Initial Fut:	0	0	84		0	0	17		17	325	39		26	469	31	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81		0.81	0.81	0.81		0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	103		0	0	21		21	399	48		32	576	38	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	103		0	0	21		21	399	48		32	576	38	
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	793	1119	200		881	1129	288		614	xxxx	xxxxx		447	xxxx	xxxxx	
Potent Cap.:	283	209	814		244	206	715		975	xxxx	xxxxx		1124	xxxx	xxxxx	
Move Cap.:	264	198	814		205	196	715		975	xxxx	xxxxx		1124	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13		0.00	0.00	0.03		0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	814	xxxxx		xxxx	715	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx		xxxxx	10.2	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*		*	B	*		*	*	*		*	*	*	
ApproachDel:	10.1				10.2				xxxxxx				xxxxxx			
ApproachLOS:	B				B				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.0 Worst Case Level Of Service: E[38.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 1!	0	0		1 0	0	1	0	1 0	2	0	1	1 0	2	0	1
Volume Module:																
Base Vol:	90	27	82		26	39	29		30	258	37		56	466	95	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	27	82		26	39	29		30	258	37		56	466	95	
Added Vol:	0	0	0		0	0	0		0	36	0		0	39	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	90	27	82		26	39	29		30	294	37		56	505	95	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	95	29	87		27	41	31		32	310	39		59	533	100	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	95	29	87		27	41	31		32	310	39		59	533	100	
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	779	1126	155		884	1065	267		634	xxxx	xxxxx		350	xxxx	xxxxx	
Potent Cap.:	289	207	869		243	225	738		959	xxxx	xxxxx		1221	xxxx	xxxxx	
Move Cap.:	221	190	869		182	207	738		959	xxxx	xxxxx		1221	xxxx	xxxxx	
Volume/Cap:	0.43	0.15	0.10		0.15	0.20	0.04		0.03	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.5	xxxx	xxxxx		0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		28.3	xxxx	xxxxx		8.9	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*		D	*	*		A	*	*		A	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	309	xxxxx		xxxx	xxxx	298		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	4.6	xxxxx		xxxxx	xxxx	0.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	38.2	xxxxx		xxxxx	xxxx	20.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*		*	*	C		*	*	*		*	*	*	
ApproachDel:	38.2				22.9				xxxxxx				xxxxxx			
ApproachLOS:	E				C				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	90	27	82	26	39	29	30	258	37		56	466	95	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	27	82	26	39	29	30	258	37		56	466	95	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-90	-27	90	-26	-39	0	0	0	0		0	90	0	
Initial Fut:	0	0	172	0	0	29	30	294	37		56	595	95	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	182	0	0	31	32	310	39		59	628	100	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	182	0	0	31	32	310	39		59	628	100	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	806	1221	155	965	1160	314	729	xxxx	xxxxx		350	xxxx	xxxxx	
Potent Cap.:	277	181	869	212	197	688	884	xxxx	xxxxx		1221	xxxx	xxxxx	
Move Cap.:	248	166	869	157	181	688	884	xxxx	xxxxx		1221	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.04	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	869	xxxxx	xxxx	xxxx	688	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.2	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.2			10.5			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.375
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.1
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	67	113	121	115	98	90	49	276	44	148	386	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	113	121	115	98	90	49	276	44	148	386	33
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	121	124	117	104	100	61	279	44	150	388	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	137	140	132	118	113	69	316	50	170	439	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	137	140	132	118	113	69	316	50	170	439	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	137	140	132	118	113	69	316	50	170	439	38
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3310	290
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.08	0.08	0.03	0.06	0.04	0.09	0.03	0.10	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.11	0.33	0.33	0.12	0.34	0.34	0.14	0.36	0.36
Volume/Cap:	0.41	0.11	0.23	0.73	0.10	0.19	0.35	0.26	0.08	0.73	0.37	0.37
Delay/Veh:	41.1	21.8	22.9	55.6	21.8	22.6	39.8	23.0	21.5	50.9	22.8	22.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.1	21.8	22.9	55.6	21.8	22.6	39.8	23.0	21.5	50.9	22.8	22.8
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	6	1	2	2	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	67	113	121	115	98	90	49	276	44	148	386	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	113	121	115	98	90	49	276	44	148	386	33
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	5	0	10	5	0	39	-10	-2	0	0	0
Initial Fut:	67	126	124	127	109	100	100	269	42	150	388	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	143	140	144	123	113	113	304	48	170	439	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	143	140	144	123	113	113	304	48	170	439	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	143	140	144	123	113	113	304	48	170	439	38
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3310	290
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.08	0.08	0.03	0.06	0.07	0.08	0.03	0.10	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.11	0.34	0.34	0.11	0.34	0.34	0.13	0.35	0.35
Volume/Cap:	0.41	0.12	0.23	0.76	0.10	0.19	0.58	0.25	0.08	0.76	0.37	0.37
Delay/Veh:	40.9	21.8	22.9	57.5	21.6	22.3	44.4	22.9	21.5	54.1	23.1	23.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.9	21.8	22.9	57.5	21.6	22.3	44.4	22.9	21.5	54.1	23.1	23.1
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	6	1	2	4	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	28.9
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	115	162	206	122	95	109	86	322	38	117	421	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	162	206	122	95	109	86	322	38	117	421	55
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	183	211	125	118	143	118	327	38	122	426	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	196	226	134	127	153	127	351	41	131	457	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	196	226	134	127	153	127	351	41	131	457	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	196	226	134	127	153	127	351	41	131	457	62
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3169	431
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.13	0.08	0.04	0.09	0.07	0.10	0.02	0.08	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.65	0.16	0.36	0.73	0.10	0.25	0.67	0.28	0.07	0.71	0.42	0.42
Delay/Veh:	47.0	20.8	22.7	53.1	20.5	21.8	48.1	21.8	20.1	51.5	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.0	20.8	22.7	53.1	20.5	21.8	48.1	21.8	20.1	51.5	23.3	23.3
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	5	6	1	3	5	4	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	32.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	115	162	206	122	95	109	86	322	38	117	421	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	162	206	122	95	109	86	322	38	117	421	55
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	27	0	19	44	0	85	-19	-2	0	0	0
Initial Fut:	115	210	211	144	162	143	203	308	36	122	426	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	225	226	154	174	153	218	330	39	131	457	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	225	226	154	174	153	218	330	39	131	457	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	225	226	154	174	153	218	330	39	131	457	62
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3169	431
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.09	0.05	0.09	0.13	0.09	0.02	0.08	0.14	0.14
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.17	0.37	0.37	0.11	0.31	0.31
Volume/Cap:	0.68	0.20	0.39	0.76	0.14	0.26	0.76	0.25	0.06	0.67	0.47	0.47
Delay/Veh:	52.6	24.7	26.9	57.3	23.4	24.5	50.3	22.3	20.6	51.5	28.1	28.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.6	24.7	26.9	57.3	23.4	24.5	50.3	22.3	20.6	51.5	28.1	28.1
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	3	6	7	2	3	9	4	1	5	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.372
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	65	294	150		17	204	66		33	46	30		86	92	24	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	65	294	150		17	204	66		33	46	30		86	92	24	
Added Vol:	0	11	0		0	9	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	65	305	150		17	213	66		33	46	30		86	92	24	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	79	372	183		21	260	80		40	56	37		105	112	29	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	79	372	183		21	260	80		40	56	37		105	112	29	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	79	372	183		21	260	80		40	56	37		105	112	29	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.43	0.57	1.00		0.44	0.44	0.12	
Final Sat.:	1700	1800	1800		1700	1800	1800		734	1023	1800		748	800	209	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.21	0.10		0.01	0.14	0.04		0.05	0.05	0.02		0.14	0.14	0.14	
Crit Moves:		****												****		
Green/Cycle:	0.56	0.56	0.56		0.56	0.56	0.56		0.38	0.38	0.38		0.38	0.38	0.38	
Volume/Cap:	0.08	0.37	0.18		0.02	0.26	0.08		0.15	0.15	0.05		0.37	0.37	0.37	
Delay/Veh:	6.2	7.7	6.7		6.0	7.1	6.2		12.4	12.4	11.9		13.9	13.9	13.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.2	7.7	6.7		6.0	7.1	6.2		12.4	12.4	11.9		13.9	13.9	13.9	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	4	2		0	3	1		1	1	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.403
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 0 1!	0	0
Volume Module:												
Base Vol:	57	428	228	17	107	96	28	38	19	54	53	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	428	228	17	107	96	28	38	19	54	53	35
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	454	228	17	134	96	28	38	19	54	53	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	64	513	258	19	151	109	32	43	21	61	60	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	513	258	19	151	109	32	43	21	61	60	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	513	258	19	151	109	32	43	21	61	60	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.44	0.56	1.00	0.39	0.37	0.24
Final Sat.:	1700	1800	1800	1700	1800	1800	745	1011	1800	670	657	434
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.14	0.01	0.08	0.06	0.04	0.04	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.06	0.49	0.25	0.02	0.14	0.10	0.12	0.12	0.03	0.26	0.26	0.26
Delay/Veh:	5.4	7.6	6.2	5.3	5.8	5.6	13.3	13.3	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.6	6.2	5.3	5.8	5.6	13.3	13.3	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.1]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	465	2		10	656	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	465	2		10	656	1	
Added Vol:	0	0	0	4	0	3	4	12	0		0	17	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	477	2		10	673	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	583	2		12	823	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	583	2		12	823	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1446	1448	583	1446	1443	823	831	xxxx	xxxxx		586	xxxx	xxxxx	
Potent Cap.:	111	132	516	111	133	376	810	xxxx	xxxxx		999	xxxx	xxxxx	
Move Cap.:	108	130	516	108	131	376	810	xxxx	xxxxx		999	xxxx	xxxxx	
Total Cap:	232	250	xxxxx	232	251	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx		8.6	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	366	xxxxx	xxxx	266	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.1	xxxxx	xxxxx	19.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.1			19.1			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.5]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R		L	-	T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled					Uncontrolled				
Rights:	Include				Include				Include					Include				
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	1	0	1	1	0	1	0	1
Volume Module:																		
Base Vol:	10	0	8	7	0	2	3	706	3	14	554	4						
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	10	0	8	7	0	2	3	706	3	14	554	4						
Added Vol:	0	0	0	8	0	6	6	40	0	0	38	8						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	10	0	8	15	0	8	9	746	3	14	592	12						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94						
PHF Volume:	11	0	9	16	0	9	10	796	3	15	632	13						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	11	0	9	16	0	9	10	796	3	15	632	13						
Critical Gap Module:																		
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	1488	1490	796	1483	1480	632	645	xxxx	xxxxx	799	xxxx	xxxxx						
Potent Cap.:	103	125	390	104	127	484	950	xxxx	xxxxx	832	xxxx	xxxxx						
Move Cap.:	99	121	390	100	123	484	950	xxxx	xxxxx	832	xxxx	xxxxx						
Total Cap:	225	244	xxxxx	222	243	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	0.05	0.00	0.02	0.07	0.00	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	9.4	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*						
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT		LT	-	LTR	- RT	
Shared Cap.:	xxxx	277	xxxxx	xxxx	274	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	18.9	xxxxx	xxxxx	19.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*						
ApproachDel:	18.9			19.5			xxxxxx			xxxxxx								
ApproachLOS:	C			C			*			*								

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: C[22.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0 1	0	1	1 0 0	1	0
Volume Module:												
Base Vol:	8	1	22	13	3	24	19	391	22	16	559	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	1	22	13	3	24	19	391	22	16	559	14
Added Vol:	3	0	0	0	0	0	0	14	2	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	1	22	13	3	24	19	405	24	16	578	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	12	1	25	15	3	27	21	456	27	18	651	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	1	25	15	3	27	21	456	27	18	651	16
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1210	1203	456	1221	1222	659	667	xxxx	xxxxx	483	xxxx	xxxxx
Potent Cap.:	161	186	608	158	181	467	932	xxxx	xxxxx	1090	xxxx	xxxxx
Move Cap.:	145	179	608	146	174	467	932	xxxx	xxxxx	1090	xxxx	xxxxx
Volume/Cap:	0.09	0.01	0.04	0.10	0.02	0.06	0.02	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	289	xxxxx	xxxx	254	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.4	xxxxx	xxxxx	22.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	19.4			22.2			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[20.4]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1		1 0	1 0	1	
Volume Module:														
Base Vol:	8	1	22	13	3	24	19	391	22		16	559	14	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	8	1	22	13	3	24	19	391	22		16	559	14	
Added Vol:	3	0	0	0	0	0	0	14	2		0	19	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	11	1	22	13	3	24	19	405	24		16	578	14	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	12	1	25	15	3	27	21	456	27		18	651	16	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	12	1	25	15	3	27	21	456	27		18	651	16	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1210	1203	456	1213	1214	651	667	xxxx	xxxxx		483	xxxx	xxxxx	
Potent Cap.:	161	186	608	160	183	472	932	xxxx	xxxxx		1090	xxxx	xxxxx	
Move Cap.:	145	179	608	148	176	472	932	xxxx	xxxxx		1090	xxxx	xxxxx	
Volume/Cap:	0.09	0.01	0.04	0.10	0.02	0.06	0.02	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	0.3	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	32.1	xxxx	xxxxx	31.9	xxxx	xxxxx	9.0	xxxx	xxxxx		8.4	xxxx	xxxxx	
LOS by Move:	D	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	551	xxxx	xxxx	398	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.1	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	11.9	xxxxx	xxxx	14.8	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	B	*	*	B	*	*	*		*	*	*	
ApproachDel:	18.4			20.4			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: E[36.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 1!	0 0		1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	15	0	15	20	0	20	39	595	16	24	545	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	0	15	20	0	20	39	595	16	24	545	21
Added Vol:	5	0	0	0	0	0	0	43	5	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	0	15	20	0	20	39	638	21	24	586	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	21	0	16	21	0	21	41	671	22	25	617	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	21	0	16	21	0	21	41	671	22	25	617	22
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1442	1443	671	1451	1454	628	639	xxxx	xxxxx	694	xxxx	xxxxx
Potent Cap.:	111	133	460	110	131	487	955	xxxx	xxxxx	911	xxxx	xxxxx
Move Cap.:	101	124	460	100	122	487	955	xxxx	xxxxx	911	xxxx	xxxxx
Volume/Cap:	0.21	0.00	0.03	0.21	0.00	0.04	0.04	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	9.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	151	xxxxx	xxxx	166	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	36.2	xxxxx	xxxxx	33.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	D	*	*	*	*	*	*	*
ApproachDel:		36.2			33.8			xxxxxx			xxxxxx	
ApproachLOS:		E			D			*			*	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: D[34.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	15	0	15				20	0	20				39	595	16				24	545	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	15	0	15				20	0	20				39	595	16				24	545	21			
Added Vol:	5	0	0				0	0	0				0	43	5				0	41	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	20	0	15				20	0	20				39	638	21				24	586	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	21	0	16				21	0	21				41	671	22				25	617	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	21	0	16				21	0	21				41	671	22				25	617	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1442	1443	671				1440	1443	617				639	xxxx	xxxxx				694	xxxx	xxxxx			
Potent Cap.:	111	133	460				112	133	494				955	xxxx	xxxxx				911	xxxx	xxxxx			
Move Cap.:	101	124	460				102	124	494				955	xxxx	xxxxx				911	xxxx	xxxxx			
Volume/Cap:	0.21	0.00	0.03				0.21	0.00	0.04				0.04	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	0.7	xxxx	xxxxx				0.7	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	49.9	xxxx	xxxxx				49.2	xxxx	xxxxx				8.9	xxxx	xxxxx				9.1	xxxx	xxxxx			
LOS by Move:	E	*	*				E	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	460				xxxx	xxxx	494				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	0.1				xxxxx	xxxx	0.1				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	13.1				xxxxx	xxxx	12.6				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	B				*	*	B				*	*	*				*	*	*			
ApproachDel:	34.1						30.9						xxxxxx						xxxxxx					
ApproachLOS:	D						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.407
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10	28	28				10	28	28				10	40	40				10	40	40			
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	10	15	190				60	38	96				37	356	8				108	454	32			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	10	15	190				60	38	96				37	356	8				108	454	32			
Added Vol:	3	0	0				0	0	4				3	9	2				0	11	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	13	15	190				60	38	100				40	365	10				108	465	32			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	16	18	233				73	47	122				49	447	12				132	570	39			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	16	18	233				73	47	122				49	447	12				132	570	39			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	16	18	233				73	47	122				49	447	12				132	570	39			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	2.00	1.00				1.00	2.00	1.00			
Final Sat.:	1700	1800	1800				1700	1800	1800				1700	3600	1800				1700	3600	1800			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.13				0.04	0.03	0.07				0.03	0.12	0.01				0.08	0.16	0.02			
Crit Moves:			****				****							****					****					
Green/Cycle:	0.10	0.28	0.28				0.10	0.28	0.28				0.11	0.40	0.40				0.14	0.43	0.43			
Volume/Cap:	0.09	0.04	0.46				0.43	0.09	0.24				0.27	0.31	0.02				0.56	0.37	0.05			
Delay/Veh:	41.1	26.2	30.4				44.1	26.7	28.1				41.7	20.7	18.1				43.0	19.3	16.5			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	41.1	26.2	30.4				44.1	26.7	28.1				41.7	20.7	18.1				43.0	19.3	16.5			
LOS by Move:	D		C		C		D		C		C		D		C		B		D		B		B	
HCM2kAvgQ:	1		0		6		3		1		3		2		5		0		5		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.388
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.4
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	18		54		195		59		32		49		113		504		13		85		452		63	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	18		54		195		59		32		49		113		504		13		85		452		63	
Added Vol:	7		0		0		0		0		8		9		27		7		0		26		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	25		54		195		59		32		57		122		531		20		85		478		63	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	26		55		200		61		33		59		125		545		21		87		491		65	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	26		55		200		61		33		59		125		545		21		87		491		65	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	26		55		200		61		33		59		125		545		21		87		491		65	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.03		0.07		0.15		0.01		0.05		0.14		0.04	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.15		0.11		0.40		0.36		0.07		0.12		0.53		0.35		0.03		0.48		0.34		0.09	
Delay/Veh:	41.5		26.8		29.7		43.3		26.5		26.9		42.1		19.1		16.3		43.9		21.0		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.5		26.8		29.7		43.3		26.5		26.9		42.1		19.1		16.3		43.9		21.0		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		1		4		6		0		3		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: E[37.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25	2	33	6	1	6	4	602	20	18	591	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	25	2	33	6	1	6	4	602	20	18	591	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	25	2	33	6	1	6	4	611	20	18	602	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	29	2	38	7	1	7	5	710	23	21	699	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	29	2	38	7	1	7	5	710	23	21	699	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1469	1469	710	1492	1483	699	708	xxxx	xxxxx	733	xxxx	xxxxx												
Potent Cap.:	107	129	437	103	126	443	900	xxxx	xxxxx	881	xxxx	xxxxx												
Move Cap.:	102	125	437	90	123	443	900	xxxx	xxxxx	881	xxxx	xxxxx												
Volume/Cap:	0.28	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		178	xxxxx		xxxx	148		xxxxx	xxxx		xxxx	xxxxx		xxxx	xxxx		xxxxx						
SharedQueue:	xxxxx		1.7	xxxxx		xxxxx	0.3		xxxxx	xxxxx		xxxx	xxxxx		xxxxx	xxxx		xxxxx						
Shrd ConDel:	xxxxx		37.6	xxxxx		xxxxx	32.1		xxxxx	xxxxx		xxxx	xxxxx		xxxxx	xxxx		xxxxx						
Shared LOS:	*		E	*		*	D		*	*		*	*		*	*		*	*		*	*		*
ApproachDel:	37.6			32.1			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[19.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		0	1 0	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	25	2	33		6	1	6		4	602	20		18	591	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	25	2	33		6	1	6		4	602	20		18	591	8	
Added Vol:	0	0	0		0	0	0		0	9	0		0	11	0	
PasserByVol:	0	-2	2		-6	-1	7		-4	10	1		0	0	0	
Initial Fut:	25	0	35		0	0	13		0	621	21		18	602	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86	
PHF Volume:	29	0	41		0	0	15		0	721	24		21	699	9	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	29	0	41		0	0	15		0	721	24		21	699	9	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1474	1472	721		1495	1487	699		xxxx	xxxx	xxxxx		746	xxxx	xxxxx	
Potent Cap.:	106	128	431		102	126	443		xxxx	xxxx	xxxxx		872	xxxx	xxxxx	
Move Cap.:	100	125	431		91	123	443		xxxx	xxxx	xxxxx		872	xxxx	xxxxx	
Total Cap:	228	250	xxxxx		211	243	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.13	0.00	0.09		0.00	0.00	0.03		xxxx	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	315	xxxxx		xxxx	443	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx		xxxxx	0.1	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	19.7	xxxxx		xxxxx	13.4	xxxxx		9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	B	*		A	*	*		*	*	*	
ApproachDel:	19.7				13.4				xxxxxx				xxxxxx			
ApproachLOS:	C				B				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[41.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 1! 0		0		0 0 1! 0		0		1 0 1 0		1		1 0 1 0		1	
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	683	53		39	580	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	20		7	2	11		10	683	53		39	580	8	
Added Vol:	0	0	0		0	0	0		0	27	0		0	26	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	30	0	20		7	2	11		10	710	53		39	606	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	30	0	20		7	2	11		10	721	54		40	615	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	30	0	20		7	2	11		10	721	54		40	615	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1446	1443	721		1472	1489	615		623	xxxx	xxxxx		774	xxxx	xxxxx	
Potent Cap.:	111	133	431		106	125	495		968	xxxx	xxxxx		850	xxxx	xxxxx	
Move Cap.:	102	126	431		97	118	495		968	xxxx	xxxxx		850	xxxx	xxxxx	
Volume/Cap:	0.30	0.00	0.05		0.07	0.02	0.02		0.01	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx		9.4	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	147	xxxxx		xxxx	179	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.4	xxxxx		xxxxx	0.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	41.9	xxxxx		xxxxx	27.6	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	41.9				27.6				xxxxxx				xxxxxx			
ApproachLOS:	E				D				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		683		53		39		580		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		683		53		39		580		8	
Added Vol:	0		0		0		0		0		0		0		27		0		0		26		0	
PasserByVol:	0		0		0		-7		-2		9		-10		17		2		0		0		0	
Initial Fut:	30		0		20		0		0		20		0		727		55		39		606		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	30		0		20		0		0		20		0		738		56		40		615		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	30		0		20		0		0		20		0		738		56		40		615		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1446		1440		738		1470		1488		615		xxxx		xxxx		xxxxx		794		xxxx		xxxxx	
Potent Cap.:	111		134		421		106		125		495		xxxx		xxxx		xxxxx		836		xxxx		xxxxx	
Move Cap.:	102		128		421		98		119		495		xxxx		xxxx		xxxxx		836		xxxx		xxxxx	
Total Cap:	230		252		xxxxx		213		233		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.13		0.00		0.05		0.00		0.00		0.04		xxxx		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.5		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		281		xxxxx		xxxx		495		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.6		xxxxx		xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		20.6		xxxxx		xxxxx		12.6		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		B		*		*		*		*		*		*		*	
ApproachDel:	20.6						12.6						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

Opening Year (2018) With Project

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.408
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	16	4	65				9	20	0				4	279	30				202	216	11			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	16	4	65				9	20	0				4	279	30				202	216	11			
Added Vol:	0	0	5				0	0	0				0	12	0				3	10	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	16	4	70				9	20	0				4	291	30				205	226	11			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88			
PHF Volume:	18	5	80				10	23	0				5	333	34				234	258	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	18	5	80				10	23	0				5	333	34				234	258	13			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	18	5	80				10	23	0				5	333	34				234	258	13			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.81	0.19	1.00				0.32	0.68	1.00				1.00	1.00	1.00				1.00	0.95	0.05			
Final Sat.:	1375	344	1800				549	1219	1800				1700	1800	1800				1700	1716	84			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.04				0.02	0.02	0.00				0.00	0.18	0.02				0.14	0.15	0.15			
Crit Moves:			****											****					****					
Green/Cycle:	0.11	0.11	0.11				0.11	0.11	0.00				0.01	0.45	0.45				0.34	0.78	0.78			
Volume/Cap:	0.12	0.12	0.41				0.17	0.17	0.00				0.19	0.41	0.04				0.41	0.19	0.19			
Delay/Veh:	24.4	24.4	26.3				24.7	24.7	0.0				33.2	11.3	9.2				15.7	1.8	1.8			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	24.4	24.4	26.3				24.7	24.7	0.0				33.2	11.3	9.2				15.7	1.8	1.8			
LOS by Move:	C	C	C				C	C	A				C	B	A				B	A	A			
HCM2kAvgQ:	0	0	2				1	1	0				0	4	0				4	1	1			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.462
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 10.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	19	9	43				12	6	2				3	265	24				240	289	18			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	19	9	43				12	6	2				3	265	24				240	289	18			
Added Vol:	0	0	8				0	0	0				0	32	0				9	34	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	19	9	51				12	6	2				3	297	24				249	323	18			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	23	11	62				15	7	2				4	363	29				305	395	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	23	11	62				15	7	2				4	363	29				305	395	22			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	23	11	62				15	7	2				4	363	29				305	395	22			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.69	0.31	1.00				0.68	0.32	1.00				1.00	1.00	1.00				1.00	0.95	0.05			
Final Sat.:	1175	556	1800				1155	577	1800				1700	1800	1800				1700	1705	95			
Capacity Analysis Module:																								
Vol/Sat:	0.02	0.02	0.03				0.01	0.01	0.00				0.00	0.20	0.02				0.18	0.23	0.23			
Crit Moves:			****											****					****					
Green/Cycle:	0.08	0.08	0.08				0.08	0.08	0.08				0.01	0.44	0.44				0.39	0.82	0.82			
Volume/Cap:	0.26	0.26	0.46				0.17	0.17	0.02				0.28	0.46	0.04				0.46	0.28	0.28			
Delay/Veh:	27.3	27.3	29.1				26.6	26.6	25.8				41.3	12.3	9.7				14.2	1.4	1.4			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	27.3	27.3	29.1				26.6	26.6	25.8				41.3	12.3	9.7				14.2	1.4	1.4			
LOS by Move:	C	C	C				C	C	C				D	B	A				B	A	A			
HCM2kAvgQ:	1	1	2				1	1	0				0	5	0				5	2	2			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[17.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	41	5	43	14	3	17	17	310	39	26	416	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	5	43	14	3	17	17	310	39	26	416	31
Added Vol:	0	0	0	2	0	0	0	19	0	0	14	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	5	43	16	3	17	17	329	39	26	430	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	50	6	53	20	4	21	21	404	48	32	528	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	50	6	53	20	4	21	21	404	48	32	528	39
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	776	1077	202	839	1086	264	567	xxxx	xxxxx	452	xxxx	xxxxx
Potent Cap.:	291	221	811	262	218	740	1015	xxxx	xxxxx	1119	xxxx	xxxxx
Move Cap.:	269	210	811	231	208	740	1015	xxxx	xxxxx	1119	xxxx	xxxxx
Volume/Cap:	0.19	0.03	0.07	0.09	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	22.1	xxxx	xxxxx	8.6	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	388	xxxxx	xxxx	xxxx	535	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	17.9	xxxxx	xxxxx	xxxx	12.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	17.9			16.5			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[11.5]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	43	14	3	17	17	310	39	26	416	31								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	43	14	3	17	17	310	39	26	416	31								
Added Vol:	0	0	0	2	0	0	0	19	0	0	14	1								
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0	0	41	0								
Initial Fut:	0	0	84	2	0	17	17	329	39	26	471	32								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	0	0	103	2	0	21	21	404	48	32	578	39								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	103	2	0	21	21	404	48	32	578	39								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	799	1127	202	886	1136	289	618	xxxx	xxxxx	452	xxxx	xxxxx								
Potent Cap.:	280	206	811	242	204	713	972	xxxx	xxxxx	1119	xxxx	xxxxx								
Move Cap.:	262	196	811	203	194	713	972	xxxx	xxxxx	1119	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.13	0.01	0.00	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	22.9	xxxx	xxxxx	8.8	xxxx	xxxxx	8.3	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		811	xxxxx		xxxx	xxxx		713		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.4	xxxxx		xxxxx	xxxx		0.1		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		10.1	xxxxx		xxxxx	xxxx		10.2		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*	*		B		*	*	*			*	*	*		
ApproachDel:	10.1			11.5			xxxxxx			xxxxxx										
ApproachLOS:	B			B			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.3 Worst Case Level Of Service: E[40.3]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0 0 1	0	1	0 2	0 1				1	0 2	0 1			
Volume Module:																		
Base Vol:	90	27	82	26	39	29	30	258	37				56	466	95			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	90	27	82	26	39	29	30	258	37				56	466	95			
Added Vol:	0	0	0	4	0	0	0	44	0				0	47	4			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	90	27	82	30	39	29	30	302	37				56	513	99			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	95	29	87	32	41	31	32	319	39				59	542	105			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	95	29	87	32	41	31	32	319	39				59	542	105			
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	792	1147	159	897	1081	271	646	xxxx	xxxxx				358	xxxx	xxxxx			
Potent Cap.:	283	201	864	238	219	733	949	xxxx	xxxxx				1212	xxxx	xxxxx			
Move Cap.:	215	185	864	177	202	733	949	xxxx	xxxxx				1212	xxxx	xxxxx			
Volume/Cap:	0.44	0.15	0.10	0.18	0.20	0.04	0.03	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	0.1	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	29.7	xxxx	xxxxx	8.9	xxxx	xxxxx				8.1	xxxx	xxxxx			
LOS by Move:	*	*	*	D	*	*	A	*	*				A	*	*			
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT				LT	- LTR	- RT			
Shared Cap.:	xxxx	302	xxxxx	xxxx	xxxx	292	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	4.8	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	40.3	xxxxx	xxxxx	xxxx	21.3	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	E	*	*	*	C	*	*	*				*	*	*			
ApproachDel:	40.3			23.9			xxxxxx						xxxxxx					
ApproachLOS:	E			C			*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[13.1]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0 2	0	1		1 0 2	0	1	
Volume Module:														
Base Vol:	90	27	82	26	39	29	30	258	37		56	466	95	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	27	82	26	39	29	30	258	37		56	466	95	
Added Vol:	0	0	0	4	0	0	0	44	0		0	47	4	
PasserByVol:	-90	-27	90	-26	-39	0	0	0	0		0	90	0	
Initial Fut:	0	0	172	4	0	29	30	302	37		56	603	99	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	182	4	0	31	32	319	39		59	637	105	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	182	4	0	31	32	319	39		59	637	105	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	819	1242	159	978	1176	318	741	xxxx	xxxxx		358	xxxx	xxxxx	
Potent Cap.:	271	176	864	208	193	683	875	xxxx	xxxxx		1212	xxxx	xxxxx	
Move Cap.:	242	162	864	154	177	683	875	xxxx	xxxxx		1212	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.03	0.00	0.04	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	864	xxxxx	xxxx	482	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	B	*	*	*	*		*	*	*	
ApproachDel:	10.3			13.1			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.387
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	67	113	121	115	98	90	49	276	44	148	386	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	113	121	115	98	90	49	276	44	148	386	33
Added Vol:	0	8	11	6	6	10	12	9	0	7	6	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	121	132	121	104	100	61	285	44	155	392	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	137	149	137	118	113	69	323	50	175	444	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	137	149	137	118	113	69	323	50	175	444	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	137	149	137	118	113	69	323	50	175	444	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3290	310
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.08	0.08	0.03	0.06	0.04	0.09	0.03	0.10	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.12	0.32	0.32	0.16	0.36	0.36
Volume/Cap:	0.41	0.12	0.26	0.66	0.10	0.19	0.35	0.28	0.09	0.66	0.37	0.37
Delay/Veh:	43.2	24.1	25.5	49.2	22.9	23.8	41.8	25.5	23.8	45.4	23.8	23.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.2	24.1	25.5	49.2	22.9	23.8	41.8	25.5	23.8	45.4	23.8	23.8
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	5	1	2	2	4	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.391
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	67	113	121	115	98	90	49	276	44	148	386	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	113	121	115	98	90	49	276	44	148	386	33
Added Vol:	0	8	11	6	6	10	12	9	0	7	6	4
PasserByVol:	0	5	0	10	5	0	39	-10	-2	0	0	0
Initial Fut:	67	126	132	131	109	100	100	275	42	155	392	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	143	149	148	123	113	113	311	48	175	444	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	143	149	148	123	113	113	311	48	175	444	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	143	149	148	123	113	113	311	48	175	444	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3290	310
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.08	0.09	0.03	0.06	0.07	0.09	0.03	0.10	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.12	0.32	0.32	0.15	0.36	0.36
Volume/Cap:	0.41	0.12	0.26	0.68	0.10	0.19	0.58	0.27	0.08	0.68	0.38	0.38
Delay/Veh:	43.0	24.1	25.5	50.0	22.7	23.5	46.2	25.4	23.8	47.3	24.1	24.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.0	24.1	25.5	50.0	22.7	23.5	46.2	25.4	23.8	47.3	24.1	24.1
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	3	6	1	2	4	4	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.442
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 29.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	115	162	206	122	95	109	86	322	38	117	421	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	162	206	122	95	109	86	322	38	117	421	55
Added Vol:	0	21	19	10	23	34	32	16	0	21	17	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	183	225	132	118	143	118	338	38	138	438	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	196	241	142	127	153	127	363	41	148	470	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	196	241	142	127	153	127	363	41	148	470	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	196	241	142	127	153	127	363	41	148	470	71
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.74	0.26
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3129	471
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.13	0.08	0.04	0.09	0.07	0.10	0.02	0.09	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.12	0.34	0.34	0.11	0.34	0.34	0.12	0.35	0.35
Volume/Cap:	0.65	0.16	0.40	0.70	0.10	0.25	0.66	0.30	0.07	0.70	0.43	0.43
Delay/Veh:	48.4	22.2	24.6	51.0	21.2	22.5	48.9	23.4	21.4	50.2	24.0	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.4	22.2	24.6	51.0	21.2	22.5	48.9	23.4	21.4	50.2	24.0	24.0
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	6	6	1	3	5	4	1	6	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.552
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	33.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	115	162	206	122	95	109	86	322	38	117	421	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	162	206	122	95	109	86	322	38	117	421	55
Added Vol:	0	21	19	10	23	34	32	16	0	21	17	11
PasserByVol:	0	27	0	19	44	0	85	-19	-2	0	0	0
Initial Fut:	115	210	225	151	162	143	203	319	36	138	438	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	225	241	162	174	153	218	342	39	148	470	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	225	241	162	174	153	218	342	39	148	470	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	225	241	162	174	153	218	342	39	148	470	71
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.74	0.26
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3129	471
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.10	0.05	0.09	0.13	0.10	0.02	0.09	0.15	0.15
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.12	0.34	0.34	0.17	0.36	0.36	0.11	0.31	0.31
Volume/Cap:	0.67	0.20	0.42	0.77	0.14	0.25	0.77	0.26	0.06	0.77	0.48	0.48
Delay/Veh:	52.1	24.7	27.2	58.3	23.3	24.4	52.0	22.5	20.8	59.9	28.3	28.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.1	24.7	27.2	58.3	23.3	24.4	52.0	22.5	20.8	59.9	28.3	28.3
LOS by Move:	D	C	C	E	C	C	D	C	C	E	C	C
HCM2kAvgQ:	5	3	6	7	2	3	9	4	1	7	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.375
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	65	294	150		17	204	66		33	46	30		86	92	24	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	65	294	150		17	204	66		33	46	30		86	92	24	
Added Vol:	0	15	0		0	11	2		4	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	65	309	150		17	215	68		37	46	30		86	92	24	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	79	377	183		21	262	83		45	56	37		105	112	29	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	79	377	183		21	262	83		45	56	37		105	112	29	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	79	377	183		21	262	83		45	56	37		105	112	29	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.46	0.54	1.00		0.44	0.44	0.12	
Final Sat.:	1700	1800	1800		1700	1800	1800		782	972	1800		748	800	209	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.21	0.10		0.01	0.15	0.05		0.06	0.06	0.02		0.14	0.14	0.14	
Crit Moves:		****												****		
Green/Cycle:	0.56	0.56	0.56		0.56	0.56	0.56		0.37	0.37	0.37		0.37	0.37	0.37	
Volume/Cap:	0.08	0.37	0.18		0.02	0.26	0.08		0.15	0.15	0.05		0.37	0.37	0.37	
Delay/Veh:	6.2	7.6	6.6		5.9	7.0	6.2		12.6	12.6	12.0		14.0	14.0	14.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.2	7.6	6.6		5.9	7.0	6.2		12.6	12.6	12.0		14.0	14.0	14.0	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	4	2		0	3	1		1	1	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.408
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	57	428	228	17	107	96	28	38	19	54	53	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	428	228	17	107	96	28	38	19	54	53	35
Added Vol:	0	33	0	0	35	8	7	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	461	228	17	142	104	35	38	19	54	53	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	64	521	258	19	161	118	40	43	21	61	60	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	521	258	19	161	118	40	43	21	61	60	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	521	258	19	161	118	40	43	21	61	60	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.49	0.51	1.00	0.39	0.37	0.24
Final Sat.:	1700	1800	1800	1700	1800	1800	839	911	1800	670	657	434
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.14	0.01	0.09	0.07	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.06	0.50	0.25	0.02	0.15	0.11	0.13	0.13	0.03	0.26	0.26	0.26
Delay/Veh:	5.4	7.7	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.7	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[19.7]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	3	0	6			2	0	0			0	465			2	10	656			1
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	3	0	6			2	0	0			0	465			2	10	656			1
Added Vol:	5	0	2			4	0	3			4	22			8	8	22			5
PasserByVol:	0	0	0			0	0	0			0	0			0	0	0			0
Initial Fut:	8	0	8			6	0	3			4	487			10	18	678			6
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.82	0.82	0.82			0.82	0.82	0.82			0.82	0.82			0.82	0.82	0.82			0.82
PHF Volume:	10	0	10			7	0	4			5	596			12	22	829			7
Reduct Vol:	0	0	0			0	0	0			0	0			0	0	0			0
FinalVolume:	10	0	10			7	0	4			5	596			12	22	829			7
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1484	1486	596			1490	1491	829			837	xxxx	xxxxx			608	xxxx	xxxxx		
Potent Cap.:	104	126	507			103	125	373			806	xxxx	xxxxx			980	xxxx	xxxxx		
Move Cap.:	101	122	507			99	121	373			806	xxxx	xxxxx			980	xxxx	xxxxx		
Total Cap:	223	241	xxxxx			220	239	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.04	0.00	0.02			0.03	0.00	0.01			0.01	xxxx	xxxx			0.02	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.5	xxxx	xxxxx			8.8	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		310	xxxxx		xxxx		255	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.2	xxxxx		xxxxx		0.1	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		17.4	xxxxx		xxxxx		19.7	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		C	*		*	*	*			*	*	*		
ApproachDel:	17.4					19.7					xxxxxx					xxxxxx				
ApproachLOS:	C					C					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[22.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10		0		8		7		0		2		3		706		3		14		554		4	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10		0		8		7		0		2		3		706		3		14		554		4	
Added Vol:	16		0		8		8		0		6		6		58		15		15		58		8	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	26		0		16		15		0		8		9		764		18		29		612		12	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94	
PHF Volume:	28		0		17		16		0		9		10		815		19		31		653		13	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	28		0		17		16		0		9		10		815		19		31		653		13	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1560		1563		815		1568		1569		653		666		xxxx		xxxxx		835		xxxx		xxxxx	
Potent Cap.:	92		113		380		91		112		471		933		xxxx		xxxxx		807		xxxx		xxxxx	
Move Cap.:	87		107		380		84		106		471		933		xxxx		xxxxx		807		xxxx		xxxxx	
Total Cap:	210		228		xxxxx		197		220		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.13		0.00		0.04		0.08		0.00		0.02		0.01		xxxx		xxxx		0.04		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.9		xxxx		xxxxx		9.6		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		253		xxxxx		xxxx		247		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.6		xxxxx		xxxxx		0.3		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		22.2		xxxxx		xxxxx		21.2		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		C		*		*		*		*		*		*		*	
ApproachDel:	22.2						21.2						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[14.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	580	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	580	0
Added Vol:	6	0	4	0	0	0	0	18	10	7	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	0	4	0	0	0	0	448	10	7	609	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88 0.88	0.88	0.88	0.88	0.88	0.88	0.88 0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	7	0	5	0	0	0	0	509	11	8	692	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	0	5	0	0	0	0	509	11	8	692	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1218 1218		509	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	521	xxxx	xxxxx
Potent Cap.:	201	182	568	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1056	xxxx	xxxxx
Move Cap.:	200	181	568	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1056	xxxx	xxxxx
Total Cap:	337	302	xxxxx	285	298	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 0.00		0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	402	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	14.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[19.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	650	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	650	0	0	580	0
Added Vol:	20	0	15	0	0	0	0	56	18	14	60	0
PasserByVol:	19	0	3	0	0	0	0	0	18	2	0	0
Initial Fut:	39	0	18	0	0	0	0	706	36	16	640	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	41	0	19	0	0	0	0	747	38	17	677	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	41	0	19	0	0	0	0	747	38	17	677	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1458	1458	747	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	785	xxxx	xxxxx
Potent Cap.:	144	131	416	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	843	xxxx	xxxxx
Move Cap.:	142	128	416	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	843	xxxx	xxxxx
Total Cap:	282	253	xxxxx	220	242	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.15	0.00	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	314	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	19.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: C[23.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 1!	0 0		1 0 1	0 1		1 0 0	1 0	
Volume Module:												
Base Vol:	8	1	22	13	3	24	19	391	22	16	559	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	1	22	13	3	24	19	391	22	16	559	14
Added Vol:	3	0	2	0	1	1	1	20	2	0	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	1	24	13	4	25	20	411	24	16	591	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	12	1	27	15	5	28	23	463	27	18	666	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	1	27	15	5	28	23	463	27	18	666	16
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1235	1226	463	1246	1245	674	682	xxxx	xxxxx	490	xxxx	xxxxx
Potent Cap.:	155	180	603	152	175	458	920	xxxx	xxxxx	1084	xxxx	xxxxx
Move Cap.:	138	173	603	140	168	458	920	xxxx	xxxxx	1084	xxxx	xxxxx
Volume/Cap:	0.09	0.01	0.04	0.10	0.03	0.06	0.02	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	287	xxxxx	xxxx	245	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.6	xxxxx	xxxxx	23.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	19.6			23.2			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: C[21.0]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1		1 0	1 0	1	
Volume Module:														
Base Vol:	8	1	22	13	3	24	19	391	22		16	559	14	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	8	1	22	13	3	24	19	391	22		16	559	14	
Added Vol:	3	0	2	0	1	1	1	20	2		0	32	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	11	1	24	13	4	25	20	411	24		16	591	14	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	12	1	27	15	5	28	23	463	27		18	666	16	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	12	1	27	15	5	28	23	463	27		18	666	16	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1235	1226	463	1238	1237	666	682	xxxx	xxxxx		490	xxxx	xxxxx	
Potent Cap.:	155	180	603	154	177	463	920	xxxx	xxxxx		1084	xxxx	xxxxx	
Move Cap.:	138	173	603	142	170	463	920	xxxx	xxxxx		1084	xxxx	xxxxx	
Volume/Cap:	0.09	0.01	0.04	0.10	0.03	0.06	0.02	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	0.3	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	33.7	xxxx	xxxxx	33.3	xxxx	xxxxx	9.0	xxxx	xxxxx		8.4	xxxx	xxxxx	
LOS by Move:	D	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	548	xxxx	xxxx	374	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.2	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	11.9	xxxxx	xxxx	15.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	B	*	*	C	*	*	*		*	*	*	
ApproachDel:	18.6			21.0			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: E[40.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	15	0	15				20	0	20				39	595	16				24	545	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	15	0	15				20	0	20				39	595	16				24	545	21			
Added Vol:	5	1	8				0	1	3				3	63	5				0	67	0			
PasserByVol:	0	0	0				0	0	2				3	0	16				15	0	0			
Initial Fut:	20	1	23				20	1	25				45	658	37				39	612	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	21	1	24				21	1	26				47	692	39				41	644	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	21	1	24				21	1	26				47	692	39				41	644	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1538	1535	692				1557	1563	655				666	xxxx	xxxxx				731	xxxx	xxxxx			
Potent Cap.:	95	117	447				93	113	470				933	xxxx	xxxxx				882	xxxx	xxxxx			
Move Cap.:	83	106	447				81	102	470				933	xxxx	xxxxx				882	xxxx	xxxxx			
Volume/Cap:	0.25	0.01	0.05				0.26	0.01	0.06				0.05	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.1	xxxx	xxxxx				9.3	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		146	xxxxx			xxxx		148	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.3	xxxxx			xxxxx		1.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		40.8	xxxxx			xxxxx		40.7	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		E	*			*	*	*				*	*	*			
ApproachDel:	40.8						40.7						xxxxxx						xxxxxx					
ApproachLOS:	E						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: D[34.2]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	15	0	15			20	0	20			39	595			16	24	545			21
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	15	0	15			20	0	20			39	595			16	24	545			21
Added Vol:	5	1	8			0	1	3			3	63			5	0	67			0
PasserByVol:	0	0	0			0	0	1			2	0			2	1	0			0
Initial Fut:	20	1	23			20	1	24			44	658			23	25	612			21
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95			0.95	0.95	0.95			0.95
PHF Volume:	21	1	24			21	1	25			46	692			24	26	644			22
Reduct Vol:	0	0	0			0	0	0			0	0			0	0	0			0
FinalVolume:	21	1	24			21	1	25			46	692			24	26	644			22
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1506	1504	692			1507	1506	644			666	xxxx	xxxxx			717	xxxx	xxxxx		
Potent Cap.:	100	123	447			100	122	476			933	xxxx	xxxxx			893	xxxx	xxxxx		
Move Cap.:	89	113	447			89	113	476			933	xxxx	xxxxx			893	xxxx	xxxxx		
Volume/Cap:	0.24	0.01	0.05			0.24	0.01	0.05			0.05	xxxx	xxxx			0.03	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	0.8	xxxx	xxxxx			0.8	xxxx	xxxxx			0.2	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	57.6	xxxx	xxxxx			57.8	xxxx	xxxxx			9.1	xxxx	xxxxx			9.2	xxxx	xxxxx		
LOS by Move:	F	*	*			F	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	398			xxxx	xxxx	422			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	0.2			xxxxx	xxxx	0.2			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	14.7			xxxxx	xxxx	14.1			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	B			*	*	B			*	*	*			*	*	*		
ApproachDel:	34.2					33.5					xxxxxx					xxxxxx				
ApproachLOS:	D					D					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 30	0		0 40	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 30	0		0 40	0		0 0	0		0 0	0	
Added Vol:	6 3	0		0 2	1		3 0	3		0 0	0	
PasserByVol:	0 0	0		0 0	0		0 0	0		0 0	0	
Initial Fut:	6 33	0		0 42	1		3 0	3		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.81 0.81	0.81		0.81 0.81	0.81		0.81 0.81	0.81		0.81 0.81	0.81	
PHF Volume:	7 41	0		0 52	1		4 0	4		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	7 41	0		0 52	1		4 0	4		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	xxxxx		xxxx xxxxx			6.4 6.5	6.2		xxxxx xxxx	xxxxx	
FollowUpTim:	2.2 xxxx xxxxx	xxxxx		xxxx xxxxx			3.5 4.0	3.3		xxxxx xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	53 xxxx xxxxx	xxxx		xxxx xxxxx			108 108	53		xxxx xxxx	xxxxx	
Potent Cap.:	1565 xxxx xxxxx	xxxx		xxxx xxxxx			894 786	1021		xxxx xxxx	xxxxx	
Move Cap.:	1565 xxxx xxxxx	xxxx		xxxx xxxxx			891 782	1021		xxxx xxxx	xxxxx	
Volume/Cap:	0.00 xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.00 0.00	0.00		xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx	xxxx		xxxx xxxxx	xxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
Control Del:	7.3 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
LOS by Move:	A *	*		* *	*		* *	*		* *	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx 951	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.0 xxxx xxxxx	xxxxx		xxxx xxxx xxxxx	xxxxx		0.0 xxxxx	xxxxx		xxxx xxxx	xxxxx	
Shrd ConDel:	7.3 xxxx xxxxx	xxxxx		xxxx xxxx xxxxx	xxxxx		8.8 xxxxx	xxxxx		xxxx xxxx	xxxxx	
Shared LOS:	A *	*		* *	*		* A	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			8.8			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: A[9.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	30	0	0	40	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	30	0	0	40	0	0	0	0	0	0	0
Added Vol:	11	5	0	0	5	1	9	0	12	0	0	0
PasserByVol:	6	0	0	0	0	17	19	0	7	0	0	0
Initial Fut:	17	35	0	0	45	18	28	0	19	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	20	41	0	0	53	21	33	0	22	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	41	0	0	53	21	33	0	22	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	74	xxxx	xxxxx	xxxx	xxxx	xxxxx	145	145	64	xxxx	xxxx	xxxxx
Potent Cap.:	1538	xxxx	xxxxx	xxxx	xxxx	xxxxx	853	750	1007	xxxx	xxxx	xxxxx
Move Cap.:	1538	xxxx	xxxxx	xxxx	xxxx	xxxxx	844	740	1007	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	903	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.2			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.408
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	10	15	190	60	38	96	37	356	8	108	454	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	15	190	60	38	96	37	356	8	108	454	32
Added Vol:	5	0	0	0	0	10	6	12	3	0	17	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	15	190	60	38	106	43	368	11	108	471	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	18	18	233	73	47	130	53	451	13	132	577	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	18	233	73	47	130	53	451	13	132	577	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	18	233	73	47	130	53	451	13	132	577	39
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.13	0.04	0.03	0.07	0.03	0.13	0.01	0.08	0.16	0.02
Crit Moves:			****	****				****		****		
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.11	0.40	0.40	0.14	0.43	0.43
Volume/Cap:	0.11	0.04	0.46	0.43	0.09	0.26	0.29	0.31	0.02	0.56	0.37	0.05
Delay/Veh:	41.2	26.2	30.4	44.1	26.7	28.2	41.9	20.7	18.1	43.0	19.4	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.2	26.2	30.4	44.1	26.7	28.2	41.9	20.7	18.1	43.0	19.4	16.5
LOS by Move:	D	C	C	D	C	C	D	C	B	D	B	B
HCM2kAvgQ:	1	0	6	3	1	3	2	5	0	5	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.399
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.7
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	18		54		195		59		32		49		113		504		13		85		452		63	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	18		54		195		59		32		49		113		504		13		85		452		63	
Added Vol:	11		0		0		0		0		19		21		39		11		0		37		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	29		54		195		59		32		68		134		543		24		85		489		63	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	30		55		200		61		33		70		138		557		25		87		502		65	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	30		55		200		61		33		70		138		557		25		87		502		65	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	30		55		200		61		33		70		138		557		25		87		502		65	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.04		0.08		0.15		0.01		0.05		0.14		0.04	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.18		0.11		0.40		0.36		0.07		0.14		0.58		0.36		0.03		0.48		0.35		0.09	
Delay/Veh:	41.7		26.8		29.7		43.3		26.5		27.1		43.7		19.2		16.4		43.9		21.1		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.7		26.8		29.7		43.3		26.5		27.1		43.7		19.2		16.4		43.9		21.1		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		2		5		6		0		3		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: E[40.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25		2		33		6		1		6		4	602		20			18	591		8		
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	25		2		33		6		1		6		4	602		20			18	591		8		
Added Vol:	2		0		0		0		0		0		0	11		1			0	15		0		
PasserByVol:	0		0		0		0		0		0		0	0		0			0	0		0		
Initial Fut:	27		2		33		6		1		6		4	613		21			18	606		8		
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	0.86	0.86		0.86		0.86	0.86		0.86		0.86		0.86	0.86		0.86			0.86	0.86		0.86		
PHF Volume:	31		2		38		7		1		7		5	712		24			21	704		9		
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0		0		
FinalVolume:	31		2		38		7		1		7		5	712		24			21	704		9		
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1476		1476		712		1499		1491		704		713	xxxx	xxxxx		736		xxxx	xxxxx				
Potent Cap.:	105		127		436		102		125		441		896	xxxx	xxxxx		878		xxxx	xxxxx				
Move Cap.:	101		124		436		89		121		441		896	xxxx	xxxxx		878		xxxx	xxxxx				
Volume/Cap:	0.31	0.02		0.09		0.08	0.01		0.02		0.01	xxxx		xxxx		0.02	xxxx		xxxx					
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx									
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.0	xxxx	xxxxx		9.2	xxxx	xxxxx									
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		172	xxxxx		xxxx		146	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		1.9	xxxxx		xxxxx		0.3	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		40.1	xxxxx		xxxxx		32.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*		E	*		*		D	*		*	*	*		*	*	*							
ApproachDel:	40.1					32.5						xxxxxx				xxxxxx								
ApproachLOS:	E					D						*				*								

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[20.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0		0	0	0 1! 0		0	0	1 0	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	25	2	33	6	1	6		4	602	20		18	591		8	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Initial Bse:	25	2	33	6	1	6		4	602	20		18	591		8	
Added Vol:	2	0	0	0	0	0		0	11	1		0	15		0	
PasserByVol:	0	-2	2	-6	-1	7		-4	10	1		0	0		0	
Initial Fut:	27	0	35	0	0	13		0	623	22		18	606		8	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86		0.86	
PHF Volume:	31	0	41	0	0	15		0	724	26		21	704		9	
Reduct Vol:	0	0	0	0	0	0		0	0	0		0	0		0	
FinalVolume:	31	0	41	0	0	15		0	724	26		21	704		9	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																
Cnflict Vol:	1481	1479	724	1502	1495	704		xxxx	xxxx	xxxxx		749	xxxx		xxxxx	
Potent Cap.:	105	127	429	101	124	441		xxxx	xxxx	xxxxx		869	xxxx		xxxxx	
Move Cap.:	99	124	429	90	121	441		xxxx	xxxx	xxxxx		869	xxxx		xxxxx	
Total Cap:	227	249	xxxxx	209	241	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx	
Volume/Cap:	0.14	0.00	0.09	0.00	0.00	0.03		xxxx	xxxx	xxxx		0.02	xxxx		xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx		xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.2	xxxx		xxxxx	
LOS by Move:	*	*	*	*	*	*		*	*	*		A	*		*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		
Shared Cap.:	xxxx	309	xxxxx	xxxx	441	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	0.1	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	20.1	xxxxx	xxxxx	13.5	xxxxx		9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*	C	*	*	B	*		A	*	*		*	*	*		
ApproachDel:	20.1			13.5				xxxxxx				xxxxxx				
ApproachLOS:	C			B				*				*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: E[46.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30	0	20				7	2	11				10	683	53				39	580	8			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	30	0	20				7	2	11				10	683	53				39	580	8			
Added Vol:	4	0	0				0	0	0				0	35	4				0	33	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	34	0	20				7	2	11				10	718	57				39	613	8			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	35	0	20				7	2	11				10	729	58				40	622	8			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	35	0	20				7	2	11				10	729	58				40	622	8			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1461	1458	729				1489	1508	622				630	xxxx	xxxxx				786	xxxx	xxxxx			
Potent Cap.:	108	131	426				103	122	490				962	xxxx	xxxxx				842	xxxx	xxxxx			
Move Cap.:	100	123	426				94	115	490				962	xxxx	xxxxx				842	xxxx	xxxxx			
Volume/Cap:	0.35	0.00	0.05				0.08	0.02	0.02				0.01	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	xxxxx				9.5	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		139	xxxxx			xxxx		175	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.7	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		46.8	xxxxx			xxxxx		28.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	46.8						28.3						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2018) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[21.5]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	30	0	20			7	2	11			10	683	53			39	580	8		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	30	0	20			7	2	11			10	683	53			39	580	8		
Added Vol:	4	0	0			0	0	0			0	35	4			0	33	0		
PasserByVol:	0	0	0			-7	-2	9			-10	17	2			0	0	0		
Initial Fut:	34	0	20			0	0	20			0	735	59			39	613	8		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.99	0.99	0.99			0.99	0.99	0.99			0.99	0.99	0.99			0.99	0.99	0.99		
PHF Volume:	35	0	20			0	0	20			0	746	60			40	622	8		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	35	0	20			0	0	20			0	746	60			40	622	8		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1461	1455	746			1487	1507	622			xxxx	xxxx	xxxxx			806	xxxx	xxxxx		
Potent Cap.:	108	131	417			104	122	490			xxxx	xxxx	xxxxx			828	xxxx	xxxxx		
Move Cap.:	100	125	417			95	116	490			xxxx	xxxx	xxxxx			828	xxxx	xxxxx		
Total Cap:	227	249	xxxxx			210	229	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.15	0.00	0.05			0.00	0.00	0.04			xxxx	xxxx	xxxx			0.05	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.2	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.6	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			*	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		273	xxxxx		xxxx		490	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.7	xxxxx		xxxxx		0.1	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		21.5	xxxxx		xxxxx		12.7	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		B	*		*	*	*			*	*	*		
ApproachDel:	21.5					12.7					xxxxxx					xxxxxx				
ApproachLOS:	C					B					*					*				

Note: Queue reported is the number of cars per lane.

Opening Year (2019) Without Project

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.404
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	11.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	16	4	65	12	28	0	5	277	30	202	215	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	4	65	12	28	0	5	277	30	202	215	11
Added Vol:	0	0	3	0	0	0	0	12	0	2	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	4	68	12	28	0	5	289	30	204	225	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	5	78	14	32	0	6	330	34	233	257	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	5	78	14	32	0	6	330	34	233	257	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	5	78	14	32	0	6	330	34	233	257	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.81	0.19	1.00	0.31	0.69	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1375	344	1800	531	1238	1800	1700	1800	1800	1700	1716	84
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.04	0.03	0.03	0.00	0.00	0.18	0.02	0.14	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.11	0.11	0.11	0.11	0.11	0.00	0.02	0.45	0.45	0.34	0.78	0.78
Volume/Cap:	0.12	0.12	0.40	0.24	0.24	0.00	0.19	0.40	0.04	0.40	0.19	0.19
Delay/Veh:	24.6	24.6	26.4	25.2	25.2	0.0	32.2	11.3	9.1	15.6	1.8	1.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	24.6	26.4	25.2	25.2	0.0	32.2	11.3	9.1	15.6	1.8	1.8
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.459
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	10.6
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	19	9	42	12	6	2	3	267	25	242	279	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	9	42	12	6	2	3	267	25	242	279	18
Added Vol:	0	0	5	0	0	0	0	32	0	5	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	9	47	12	6	2	3	299	25	247	313	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	23	11	58	15	7	2	4	366	31	302	383	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	11	58	15	7	2	4	366	31	302	383	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	11	58	15	7	2	4	366	31	302	383	22
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.69	0.31	1.00	0.68	0.32	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1175	556	1800	1155	577	1800	1700	1800	1800	1700	1702	98
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.03	0.01	0.01	0.00	0.00	0.20	0.02	0.18	0.23	0.23
Crit Moves:			****					****		****		
Green/Cycle:	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.44	0.44	0.39	0.82	0.82
Volume/Cap:	0.28	0.28	0.46	0.18	0.18	0.02	0.27	0.46	0.04	0.46	0.27	0.27
Delay/Veh:	27.8	27.8	29.5	27.0	27.0	26.1	40.4	12.1	9.5	14.2	1.3	1.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	27.8	29.5	27.0	27.0	26.1	40.4	12.1	9.5	14.2	1.3	1.3
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.7]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0 0 1	0	1	0 2	0 1				1	0 2	0 1			
Volume Module:																		
Base Vol:	41	5	43	14	3	17	17	310	39				26	416	32			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	41	5	43	14	3	17	17	310	39				26	416	32			
Added Vol:	0	0	0	0	0	0	0	15	0				0	12	0			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	41	5	43	14	3	17	17	325	39				26	428	32			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81			
PHF Volume:	50	6	53	17	4	21	21	399	48				32	526	39			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	50	6	53	17	4	21	21	399	48				32	526	39			
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	769	1070	200	834	1078	263	565	xxxx	xxxxx				447	xxxx	xxxxx			
Potent Cap.:	294	223	814	264	220	742	1017	xxxx	xxxxx				1124	xxxx	xxxxx			
Move Cap.:	272	212	814	233	210	742	1017	xxxx	xxxxx				1124	xxxx	xxxxx			
Volume/Cap:	0.19	0.03	0.06	0.07	0.02	0.03	0.02	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	21.7	xxxx	xxxxx	8.6	xxxx	xxxxx				8.3	xxxx	xxxxx			
LOS by Move:	*	*	*	C	*	*	A	*	*				A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	391	xxxxx	xxxx	xxxx	537	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	17.7	xxxxx	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	C	*	*	*	B	*	*	*				*	*	*			
ApproachDel:	17.7			16.0			xxxxxx						xxxxxx					
ApproachLOS:	C			C			*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	43	14	3	17	17	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43	14	3	17	17	310	39		26	416	32	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	84	0	0	17	17	325	39		26	469	32	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	103	0	0	21	21	399	48		32	576	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	103	0	0	21	21	399	48		32	576	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	793	1120	200	881	1129	288	615	xxxx	xxxxx		447	xxxx	xxxxx	
Potent Cap.:	283	208	814	244	206	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Move Cap.:	264	198	814	205	196	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.00	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	814	xxxxx	xxxx	xxxx	715	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			10.2			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.2 Worst Case Level Of Service: E[39.1]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0 1	0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	90	27	82	26	39	30	31	263	37		57	461	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	27	82	26	39	30	31	263	37		57	461	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	90	27	82	26	39	30	31	299	37		57	500	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	95	29	87	27	41	32	33	316	39		60	528	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	95	29	87	27	41	32	33	316	39		60	528	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	786	1127	158	886	1069	264	625	xxxx	xxxxx		355	xxxx	xxxxx	
Potent Cap.:	286	206	866	242	223	740	966	xxxx	xxxxx		1215	xxxx	xxxxx	
Move Cap.:	217	189	866	181	205	740	966	xxxx	xxxxx		1215	xxxx	xxxxx	
Volume/Cap:	0.44	0.15	0.10	0.15	0.20	0.04	0.03	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	28.4	xxxx	xxxxx	8.9	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	306	xxxxx	xxxx	xxxx	299	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	4.7	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	39.1	xxxxx	xxxxx	xxxx	20.9	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*	*	*	C	*	*	*		*	*	*	
ApproachDel:	39.1			22.9			xxxxxx				xxxxxx			
ApproachLOS:	E			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	90	27	82	26	39	30	31	263	37		57	461	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	27	82	26	39	30	31	263	37		57	461	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-90	-27	90	-26	-39	0	0	0	0		0	90	0	
Initial Fut:	0	0	172	0	0	30	31	299	37		57	590	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	182	0	0	32	33	316	39		60	623	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	182	0	0	32	33	316	39		60	623	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	813	1222	158	967	1164	312	720	xxxx	xxxxx		355	xxxx	xxxxx	
Potent Cap.:	273	181	866	212	196	690	891	xxxx	xxxxx		1215	xxxx	xxxxx	
Move Cap.:	244	166	866	156	180	690	891	xxxx	xxxxx		1215	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	866	xxxxx	xxxx	xxxx	690	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			10.5			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.375
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	67	113	121	115	103	92	49	274	46	151	383	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	113	121	115	103	92	49	274	46	151	383	33
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	121	124	117	109	102	61	277	46	153	385	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	137	140	132	123	115	69	313	52	173	436	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	137	140	132	123	115	69	313	52	173	436	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	137	140	132	123	115	69	313	52	173	436	38
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3308	292
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.08	0.08	0.03	0.06	0.04	0.09	0.03	0.10	0.13	0.13
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.12	0.32	0.32	0.16	0.36	0.36
Volume/Cap:	0.41	0.12	0.24	0.64	0.10	0.19	0.35	0.27	0.09	0.64	0.36	0.36
Delay/Veh:	43.2	24.1	25.3	48.6	23.0	23.9	41.7	25.5	23.9	44.6	23.6	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.2	24.1	25.3	48.6	23.0	23.9	41.7	25.5	23.9	44.6	23.6	23.6
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	5	1	3	2	4	1	6	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0
Volume Module:																
Base Vol:	67	113	121		115	103	92		49	274	46		151	383	33	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	67	113	121		115	103	92		49	274	46		151	383	33	
Added Vol:	0	8	3		2	6	10		12	3	0		2	2	1	
PasserByVol:	0	5	0		10	5	0		39	-10	-2		0	0	0	
Initial Fut:	67	126	124		127	114	102		100	267	44		153	385	34	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	76	143	140		144	129	115		113	302	50		173	436	38	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	76	143	140		144	129	115		113	302	50		173	436	38	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	76	143	140		144	129	115		113	302	50		173	436	38	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.84	0.16	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3308	292	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.04	0.08		0.08	0.04	0.06		0.07	0.08	0.03		0.10	0.13	0.13	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.11	0.32	0.32		0.13	0.34	0.34		0.12	0.32	0.32		0.15	0.36	0.36	
Volume/Cap:	0.41	0.12	0.24		0.67	0.11	0.19		0.58	0.26	0.09		0.67	0.37	0.37	
Delay/Veh:	43.0	24.1	25.3		49.3	22.8	23.6		46.1	25.4	23.8		46.3	23.9	23.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	43.0	24.1	25.3		49.3	22.8	23.6		46.1	25.4	23.8		46.3	23.9	23.9	
LOS by Move:	D	C	C		D	C	C		D	C	C		D	C	C	
HCM2kAvgQ:	3	2	3		6	1	3		4	3	1		7	5	5	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.0
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	115	169	206	125	97	108	87	318	37	116	417	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	169	206	125	97	108	87	318	37	116	417	57
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	190	211	128	120	142	119	323	37	121	422	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	204	226	137	129	152	128	346	40	130	453	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	204	226	137	129	152	128	346	40	130	453	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	204	226	137	129	152	128	346	40	130	453	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3152	448
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.08	0.04	0.08	0.08	0.10	0.02	0.08	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.65	0.16	0.36	0.74	0.10	0.25	0.67	0.28	0.06	0.70	0.42	0.42
Delay/Veh:	47.0	20.8	22.7	54.7	20.5	21.8	48.5	21.8	20.0	51.1	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.0	20.8	22.7	54.7	20.5	21.8	48.5	21.8	20.0	51.1	23.3	23.3
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	5	6	1	3	5	4	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	33.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	115	169	206	125	97	108	87	318	37	116	417	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	169	206	125	97	108	87	318	37	116	417	57
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	27	0	19	44	0	85	-19	-2	0	0	0
Initial Fut:	115	217	211	147	164	142	204	304	35	121	422	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	233	226	158	176	152	219	326	38	130	453	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	233	226	158	176	152	219	326	38	130	453	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	233	226	158	176	152	219	326	38	130	453	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3152	448
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.09	0.05	0.08	0.13	0.09	0.02	0.08	0.14	0.14
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.17	0.36	0.36	0.11	0.31	0.31
Volume/Cap:	0.67	0.20	0.39	0.76	0.15	0.25	0.76	0.25	0.06	0.67	0.46	0.46
Delay/Veh:	52.4	24.8	26.9	58.0	23.4	24.5	51.2	22.3	20.7	51.3	28.1	28.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.4	24.8	26.9	58.0	23.4	24.5	51.2	22.3	20.7	51.3	28.1	28.1
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	3	6	7	2	3	9	3	1	5	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.376
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	65	300	150		19	208	70		34	47	28		83	93	26	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	65	300	150		19	208	70		34	47	28		83	93	26	
Added Vol:	0	11	0		0	9	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	65	311	150		19	217	70		34	47	28		83	93	26	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	79	379	183		23	265	85		41	57	34		101	113	32	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	79	379	183		23	265	85		41	57	34		101	113	32	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	79	379	183		23	265	85		41	57	34		101	113	32	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.43	0.57	1.00		0.42	0.45	0.13	
Final Sat.:	1700	1800	1800		1700	1800	1800		737	1019	1800		722	809	226	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.21	0.10		0.01	0.15	0.05		0.06	0.06	0.02		0.14	0.14	0.14	
Crit Moves:		****												****		
Green/Cycle:	0.56	0.56	0.56		0.56	0.56	0.56		0.37	0.37	0.37		0.37	0.37	0.37	
Volume/Cap:	0.08	0.38	0.18		0.02	0.26	0.08		0.15	0.15	0.05		0.38	0.38	0.38	
Delay/Veh:	6.1	7.6	6.5		5.9	6.9	6.1		12.6	12.6	12.1		14.1	14.1	14.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.1	7.6	6.5		5.9	6.9	6.1		12.6	12.6	12.1		14.1	14.1	14.1	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	4	2		0	3	1		1	1	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.409
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	56	436	237	18	108	96	29	38	19	54	53	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	436	237	18	108	96	29	38	19	54	53	36
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	462	237	18	135	96	29	38	19	54	53	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	63	522	268	20	153	109	33	43	21	61	60	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	522	268	20	153	109	33	43	21	61	60	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	522	268	20	153	109	33	43	21	61	60	41
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.45	0.55	1.00	0.39	0.36	0.25
Final Sat.:	1700	1800	1800	1700	1800	1800	760	996	1800	665	653	443
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.15	0.01	0.08	0.06	0.04	0.04	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.06	0.50	0.26	0.02	0.15	0.10	0.12	0.12	0.03	0.26	0.26	0.26
Delay/Veh:	5.4	7.7	6.2	5.3	5.8	5.6	13.3	13.3	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.7	6.2	5.3	5.8	5.6	13.3	13.3	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	3	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.4]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	666	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	666	1	
Added Vol:	0	0	0	4	0	3	4	12	0		0	17	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	486	2		10	683	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	594	2		12	835	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	594	2		12	835	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1470	1472	594	1469	1467	835	843	xxxx	xxxxx		597	xxxx	xxxxx	
Potent Cap.:	106	128	508	107	129	370	802	xxxx	xxxxx		990	xxxx	xxxxx	
Move Cap.:	104	126	508	104	127	370	802	xxxx	xxxxx		990	xxxx	xxxxx	
Total Cap:	227	246	xxxxx	228	247	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	360	xxxxx	xxxx	261	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.3	xxxxx	xxxxx	19.4	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.3			19.4			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10	0	8				7	0	2				3	715	3				14	554	4			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	10	0	8				7	0	2				3	715	3				14	554	4			
Added Vol:	0	0	0				8	0	6				6	40	0				0	38	8			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	10	0	8				15	0	8				9	755	3				14	592	12			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94			
PHF Volume:	11	0	9				16	0	9				10	806	3				15	632	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	11	0	9				16	0	9				10	806	3				15	632	13			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1497	1500	806				1493	1490	632				645	xxxx	xxxxx				809	xxxx	xxxxx			
Potent Cap.:	102	123	385				103	125	484				950	xxxx	xxxxx				825	xxxx	xxxxx			
Move Cap.:	98	120	385				98	121	484				950	xxxx	xxxxx				825	xxxx	xxxxx			
Total Cap:	223	242	xxxxx				220	241	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.05	0.00	0.02				0.07	0.00	0.02				0.01	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	xxxxx				9.4	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		275	xxxxx			xxxx		271	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.2	xxxxx			xxxxx		0.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		19.1	xxxxx			xxxxx		19.6	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	19.1						19.6						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: C[22.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 1!	0 0		1 0 1	0 1		1 0 0	1 0	
Volume Module:												
Base Vol:	8	1	21	16	3	31	19	393	22	15	561	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	1	21	16	3	31	19	393	22	15	561	14
Added Vol:	3	0	0	0	0	0	0	14	2	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	1	21	16	3	31	19	407	24	15	580	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	12	1	24	18	3	35	21	459	27	17	654	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	1	24	18	3	35	21	459	27	17	654	16
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1216	1205	459	1223	1224	662	669	xxxx	xxxxx	486	xxxx	xxxxx
Potent Cap.:	159	185	606	158	181	466	930	xxxx	xxxxx	1088	xxxx	xxxxx
Move Cap.:	141	178	606	146	174	466	930	xxxx	xxxxx	1088	xxxx	xxxxx
Volume/Cap:	0.09	0.01	0.04	0.12	0.02	0.08	0.02	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	279	xxxxx	xxxx	259	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.9	xxxxx	xxxxx	22.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	19.9			22.7			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.421
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	13.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted					Permitted					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	19	19	19			19	19	19			10	32	32			10	32	32		
Lanes:	1	0	0	1	0	1	0	0	1	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	8	1	21			16	3	31			19	393	22			15	561	14		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	8	1	21			16	3	31			19	393	22			15	561	14		
Added Vol:	3	0	0			0	0	0			0	14	2			0	19	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	11	1	21			16	3	31			19	407	24			15	580	14		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.89	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89		
PHF Volume:	12	1	24			18	3	35			21	459	27			17	654	16		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	12	1	24			18	3	35			21	459	27			17	654	16		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	12	1	24			18	3	35			21	459	27			17	654	16		
Saturation Flow Module:																				
Sat/Lane:	1800	1800	1800			1800	1800	1800			1800	1800	1800			1800	1800	1800		
Adjustment:	0.94	1.00	1.00			0.94	1.00	1.00			0.94	1.00	1.00			0.94	1.00	1.00		
Lanes:	1.00	0.05	0.95			1.00	0.09	0.91			1.00	1.00	1.00			1.00	1.00	1.00		
Final Sat.:	1700	82	1718			1700	159	1641			1700	1800	1800			1700	1800	1800		
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.01	0.01			0.01	0.02	0.02			0.01	0.25	0.02			0.01	0.36	0.01		
Crit Moves:							****				****						****			
Green/Cycle:	0.18	0.18	0.18			0.18	0.18	0.18			0.10	0.58	0.58			0.18	0.67	0.67		
Volume/Cap:	0.04	0.08	0.08			0.06	0.12	0.12			0.13	0.44	0.03			0.05	0.54	0.01		
Delay/Veh:	35.5	35.8	35.8			35.7	36.1	36.1			43.9	12.7	9.4			35.6	9.7	5.9		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	35.5	35.8	35.8			35.7	36.1	36.1			43.9	12.7	9.4			35.6	9.7	5.9		
LOS by Move:	D	D	D			D	D	D			D	B	A			D	A	A		
HCM2kAvgQ:	0	1	1			1	1	1			1	8	0			0	11	0		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: E[37.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	19	0	21				25	0	24				38	594	15				25	545	22			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	19	0	21				25	0	24				38	594	15				25	545	22			
Added Vol:	5	0	0				0	0	0				0	43	5				0	41	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	24	0	21				25	0	24				38	637	20				25	586	22			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	25	0	22				26	0	25				40	670	21				26	617	23			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	25	0	22				26	0	25				40	670	21				26	617	23			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1444	1443	670				1453	1452	628				640	xxxx	xxxxx				691	xxxx	xxxxx			
Potent Cap.:	111	133	460				109	132	486				954	xxxx	xxxxx				913	xxxx	xxxxx			
Move Cap.:	100	124	460				99	123	486				954	xxxx	xxxxx				913	xxxx	xxxxx			
Volume/Cap:	0.25	0.00	0.05				0.27	0.00	0.05				0.04	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.9	xxxx	xxxxx				9.1	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		157	xxxxx			xxxx		162	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.2	xxxxx			xxxxx		1.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		37.5	xxxxx			xxxxx		37.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		E	*			*	*	*				*	*	*			
ApproachDel:	37.5						37.3						xxxxxx						xxxxxx					
ApproachLOS:	E						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	130	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	14.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	0 1	0 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	19	0	21	25	0	24	38	594	15	25	545	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	0	21	25	0	24	38	594	15	25	545	22
Added Vol:	5	0	0	0	0	0	0	43	5	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	0	21	25	0	24	38	637	20	25	586	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	0	22	26	0	25	40	670	21	26	617	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	0	22	26	0	25	40	670	21	26	617	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	0	22	26	0	25	40	670	21	26	617	23
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	0	1800	1700	0	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.02	0.00	0.01	0.02	0.37	0.01	0.02	0.34	0.01
Crit Moves:				****				****		****		
Green/Cycle:	0.15	0.00	0.15	0.15	0.00	0.15	0.15	0.73	0.73	0.08	0.66	0.66
Volume/Cap:	0.10	0.00	0.08	0.11	0.00	0.10	0.16	0.51	0.02	0.20	0.52	0.02
Delay/Veh:	48.3	0.0	48.1	48.3	0.0	48.2	48.6	7.8	4.8	57.0	11.9	7.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.3	0.0	48.1	48.3	0.0	48.2	48.6	7.8	4.8	57.0	11.9	7.6
LOS by Move:	D	A	D	D	A	D	D	A	A	E	B	A
HCM2kAvgQ:	1	0	1	1	0	1	2	11	0	1	13	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.411
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	10	16	192	62	39	100	41	353	8	109	460	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	16	192	62	39	100	41	353	8	109	460	33
Added Vol:	3	0	0	0	0	4	3	9	2	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	16	192	62	39	104	44	362	10	109	471	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	16	20	235	76	48	127	54	443	12	134	577	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	20	235	76	48	127	54	443	12	134	577	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	20	235	76	48	127	54	443	12	134	577	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.13	0.04	0.03	0.07	0.03	0.12	0.01	0.08	0.16	0.02
Crit Moves:			****	****				****		****		
Green/Cycle:	0.10	0.29	0.29	0.10	0.29	0.29	0.10	0.42	0.42	0.10	0.42	0.42
Volume/Cap:	0.09	0.04	0.45	0.43	0.09	0.24	0.30	0.30	0.02	0.75	0.38	0.05
Delay/Veh:	39.1	24.4	28.3	42.0	24.8	26.2	40.8	18.7	16.5	58.5	19.6	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.1	24.4	28.3	42.0	24.8	26.2	40.8	18.7	16.5	58.5	19.6	16.7
LOS by Move:	D	C	C	D	C	C	D	B	B	E	B	B
HCM2kAvgQ:	1	0	6	3	1	3	2	4	0	6	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.389
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.5
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	19		54		195		59		32		50		115		507		14		84		451		61	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	19		54		195		59		32		50		115		507		14		84		451		61	
Added Vol:	7		0		0		0		0		8		9		27		7		0		26		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	26		54		195		59		32		58		124		534		21		84		477		61	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	27		55		200		61		33		60		127		548		22		86		490		63	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	27		55		200		61		33		60		127		548		22		86		490		63	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	27		55		200		61		33		60		127		548		22		86		490		63	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.03		0.07		0.15		0.01		0.05		0.14		0.03	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.16		0.11		0.40		0.36		0.07		0.12		0.53		0.35		0.03		0.47		0.34		0.09	
Delay/Veh:	41.6		26.8		29.7		43.3		26.5		26.9		42.3		19.2		16.3		43.8		21.0		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.6		26.8		29.7		43.3		26.5		26.9		42.3		19.2		16.3		43.8		21.0		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		1		5		6		0		3		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: E[38.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25	2	33	6	1	6	4	602	20	18	601	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	25	2	33	6	1	6	4	602	20	18	601	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	25	2	33	6	1	6	4	611	20	18	612	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	29	2	38	7	1	7	5	710	23	21	711	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	29	2	38	7	1	7	5	710	23	21	711	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1480	1481	710	1503	1495	711	720	xxxx	xxxxx	733	xxxx	xxxxx												
Potent Cap.:	105	127	437	101	124	436	891	xxxx	xxxxx	881	xxxx	xxxxx												
Move Cap.:	100	123	437	89	121	436	891	xxxx	xxxxx	881	xxxx	xxxxx												
Volume/Cap:	0.29	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	176	xxxxx	xxxx	145	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	1.7	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	38.4	xxxxx	xxxxx	32.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	E	*	*	D	*	*	*	*	*	*	*												
ApproachDel:	38.4			32.7			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[19.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25	2	33	6	1	6	4	602	20	18	601	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	25	2	33	6	1	6	4	602	20	18	601	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0												
Initial Fut:	25	0	35	0	0	13	0	621	21	18	612	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	29	0	41	0	0	15	0	721	24	21	711	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	29	0	41	0	0	15	0	721	24	21	711	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1486	1483	721	1506	1498	711	xxxx	xxxx	xxxxx	746	xxxx	xxxxx												
Potent Cap.:	104	126	431	100	124	436	xxxx	xxxx	xxxxx	872	xxxx	xxxxx												
Move Cap.:	98	123	431	89	121	436	xxxx	xxxx	xxxxx	872	xxxx	xxxxx												
Total Cap:	226	248	xxxxx	209	241	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	0.13	0.00	0.09	0.00	0.00	0.03	xxxx	xxxx	xxxx	0.02	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		313	xxxxx		xxxx		436	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		0.8	xxxxx		xxxxx		0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		19.8	xxxxx		xxxxx		13.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*		C	*		*		B	*		*	*	*		*	*	*							
ApproachDel:			19.8					13.5				xxxxxx					xxxxxx							
ApproachLOS:			C					B				*					*							

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[41.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 1! 0 0				0 0 1! 0 0				1 0 1 0 1				1 0 1 0 1			
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	683	53		39	580	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	20		7	2	11		10	683	53		39	580	8	
Added Vol:	0	0	0		0	0	0		0	27	0		0	26	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	30	0	20		7	2	11		10	710	53		39	606	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	30	0	20		7	2	11		10	721	54		40	615	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	30	0	20		7	2	11		10	721	54		40	615	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1446	1443	721		1472	1489	615		623	xxxx	xxxxx		774	xxxx	xxxxx	
Potent Cap.:	111	133	431		106	125	495		968	xxxx	xxxxx		850	xxxx	xxxxx	
Move Cap.:	102	126	431		97	118	495		968	xxxx	xxxxx		850	xxxx	xxxxx	
Volume/Cap:	0.30	0.00	0.05		0.07	0.02	0.02		0.01	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx		9.4	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	147	xxxxx		xxxx	179	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.4	xxxxx		xxxxx	0.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	41.9	xxxxx		xxxxx	27.6	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	41.9				27.6				xxxxxx				xxxxxx			
ApproachLOS:	E				D				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		683		53		39		580		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		683		53		39		580		8	
Added Vol:	0		0		0		0		0		0		0		27		0		0		26		0	
PasserByVol:	0		0		0		-7		-2		9		-10		17		2		0		0		0	
Initial Fut:	30		0		20		0		0		20		0		727		55		39		606		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	30		0		20		0		0		20		0		738		56		40		615		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	30		0		20		0		0		20		0		738		56		40		615		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1446		1440		738		1470		1488		615		xxxx		xxxx		xxxxx		794		xxxx		xxxxx	
Potent Cap.:	111		134		421		106		125		495		xxxx		xxxx		xxxxx		836		xxxx		xxxxx	
Move Cap.:	102		128		421		98		119		495		xxxx		xxxx		xxxxx		836		xxxx		xxxxx	
Total Cap:	230		252		xxxxx		213		233		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.13		0.00		0.05		0.00		0.00		0.04		xxxx		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.5		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		281		xxxxx		xxxx		495		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.6		xxxxx		xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		20.6		xxxxx		xxxxx		12.6		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		B		*		*		*		*		*		*		*	
ApproachDel:	20.6						12.6						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

Opening Year (2019) With Project

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.408
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	12.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0 1	0
Volume Module:												
Base Vol:	16	4	65	12	28	0	5	277	30	202	215	11
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	16	4	65	12	28	0	5	277	30	202	215	11
Added Vol:	0	0	6	0	0	0	0	12	0	4	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	4	71	12	28	0	5	289	30	206	225	11
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88		0.88 0.88	0.88	
PHF Volume:	18	5	81	14	32	0	6	330	34	235	257	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	5	81	14	32	0	6	330	34	235	257	13
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	18	5	81	14	32	0	6	330	34	235	257	13
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800	1800		1800 1800	1800		1800 1800	1800	
Adjustment:	0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00		0.94 1.00	1.00	
Lanes:	0.81 0.19	1.00		0.31 0.69	1.00		1.00 1.00	1.00		1.00 0.95	0.05	
Final Sat.:	1375 344	1800		531 1238	1800		1700 1800	1800		1700 1716	84	
Capacity Analysis Module:												
Vol/Sat:	0.01 0.01	0.05		0.03 0.03	0.00		0.00 0.18	0.02		0.14 0.15	0.15	
Crit Moves:		****						****		****		
Green/Cycle:	0.11 0.11	0.11		0.11 0.11	0.00		0.02 0.45	0.45		0.34 0.77	0.77	
Volume/Cap:	0.12 0.12	0.41		0.23 0.23	0.00		0.19 0.41	0.04		0.41 0.19	0.19	
Delay/Veh:	24.3 24.3	26.2		25.0 25.0	0.0		32.3 11.5	9.3		15.7 1.9	1.9	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	24.3 24.3	26.2		25.0 25.0	0.0		32.3 11.5	9.3		15.7 1.9	1.9	
LOS by Move:	C C	C		C C	A		C	B		A B	A	
HCM2kAvgQ:	0 0	2		1 1	0		0	4		0 4	1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.466
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 10.8
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	1	0	0 1	0	1	0	0 1	1	0	1	0 1	1	0	0	1 0
Volume Module:																
Base Vol:	19	9	42		12	6	2		3	267	25		242	279	18	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	19	9	42		12	6	2		3	267	25		242	279	18	
Added Vol:	0	0	10		0	0	0		0	32	0		9	34	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	19	9	52		12	6	2		3	299	25		251	313	18	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	23	11	64		15	7	2		4	366	31		307	383	22	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	23	11	64		15	7	2		4	366	31		307	383	22	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	23	11	64		15	7	2		4	366	31		307	383	22	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	0.69	0.31	1.00		0.68	0.32	1.00		1.00	1.00	1.00		1.00	0.95	0.05	
Final Sat.:	1175	556	1800		1155	577	1800		1700	1800	1800		1700	1702	98	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.04		0.01	0.01	0.00		0.00	0.20	0.02		0.18	0.23	0.23	
Crit Moves:			****							****			****			
Green/Cycle:	0.08	0.08	0.08		0.08	0.08	0.08		0.01	0.44	0.44		0.39	0.82	0.82	
Volume/Cap:	0.26	0.26	0.47		0.17	0.17	0.02		0.28	0.47	0.04		0.47	0.28	0.28	
Delay/Veh:	27.2	27.2	29.1		26.6	26.6	25.7		40.5	12.4	9.7		14.2	1.4	1.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	27.2	27.2	29.1		26.6	26.6	25.7		40.5	12.4	9.7		14.2	1.4	1.4	
LOS by Move:	C	C	C		C	C	C		D	B	A		B	A	A	
HCM2kAvgQ:	1	1	2		1	1	0		0	5	0		5	2	2	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[18.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	41	5	43	14	3	17	17	310	39	26	416	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	5	43	14	3	17	17	310	39	26	416	32
Added Vol:	0	0	0	3	0	0	0	22	0	0	16	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	5	43	17	3	17	17	332	39	26	432	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	50	6	53	21	4	21	21	408	48	32	531	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	50	6	53	21	4	21	21	408	48	32	531	42
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	781	1086	204	843	1092	265	572	xxxx	xxxxx	456	xxxx	xxxxx
Potent Cap.:	289	218	809	260	216	739	1010	xxxx	xxxxx	1116	xxxx	xxxxx
Move Cap.:	266	208	809	229	206	739	1010	xxxx	xxxxx	1116	xxxx	xxxxx
Volume/Cap:	0.19	0.03	0.07	0.09	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	22.3	xxxx	xxxxx	8.6	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	385	xxxxx	xxxx	xxxx	532	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	18.0	xxxxx	xxxxx	xxxx	12.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	18.0			16.8			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[12.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1				1 0 2 0 1			
Volume Module:														
Base Vol:	41	5	43	14	3	17	17	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43	14	3	17	17	310	39		26	416	32	
Added Vol:	0	0	0	3	0	0	0	22	0		0	16	2	
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	84	3	0	17	17	332	39		26	473	34	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	103	4	0	21	21	408	48		32	581	42	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	103	4	0	21	21	408	48		32	581	42	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	804	1136	204	890	1142	290	623	xxxx	xxxxx		456	xxxx	xxxxx	
Potent Cap.:	278	204	809	240	202	712	968	xxxx	xxxxx		1116	xxxx	xxxxx	
Move Cap.:	259	194	809	202	192	712	968	xxxx	xxxxx		1116	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.02	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	23.2	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	809	xxxxx	xxxx	xxxx	712	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			12.2			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.6 Worst Case Level Of Service: E[41.9]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0 0 1	0	1	0 2	0 1				1	0 2	0 1			
Volume Module:																		
Base Vol:	90	27	82	26	39	30	31	263	37				57	461	92			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	90	27	82	26	39	30	31	263	37				57	461	92			
Added Vol:	0	0	0	5	0	0	0	46	0				0	48	5			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	90	27	82	31	39	30	31	309	37				57	509	97			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	95	29	87	33	41	32	33	326	39				60	538	102			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	95	29	87	33	41	32	33	326	39				60	538	102			
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	802	1152	163	901	1089	269	640	xxxx	xxxxx				365	xxxx	xxxxx			
Potent Cap.:	279	199	859	236	217	735	954	xxxx	xxxxx				1204	xxxx	xxxxx			
Move Cap.:	211	183	859	176	199	735	954	xxxx	xxxxx				1204	xxxx	xxxxx			
Volume/Cap:	0.45	0.16	0.10	0.19	0.21	0.04	0.03	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	0.1	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	30.1	xxxx	xxxxx	8.9	xxxx	xxxxx				8.1	xxxx	xxxxx			
LOS by Move:	*	*	*	D	*	*	A	*	*				A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	297	xxxxx	xxxx	xxxx	292	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	5.0	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	41.9	xxxxx	xxxxx	xxxx	21.4	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	E	*	*	*	C	*	*	*				*	*	*			
ApproachDel:	41.9			24.1			xxxxxx						xxxxxx					
ApproachLOS:	E			C			*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[13.2]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	90	27	82	26	39	30	31	263	37	57	461	92								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	90	27	82	26	39	30	31	263	37	57	461	92								
Added Vol:	0	0	0	5	0	0	0	46	0	0	48	5								
PasserByVol:	-90	-27	90	-26	-39	0	0	0	0	0	90	0								
Initial Fut:	0	0	172	5	0	30	31	309	37	57	599	97								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	0	0	182	5	0	32	33	326	39	60	633	102								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	182	5	0	32	33	326	39	60	633	102								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	828	1247	163	982	1184	316	735	xxxx	xxxxx	365	xxxx	xxxxx								
Potent Cap.:	267	175	859	207	191	685	879	xxxx	xxxxx	1204	xxxx	xxxxx								
Move Cap.:	238	160	859	152	175	685	879	xxxx	xxxxx	1204	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.21	0.03	0.00	0.05	0.04	xxxx	xxxx	0.05	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	29.5	xxxx	xxxxx	9.3	xxxx	xxxxx	8.1	xxxx	xxxxx								
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		859	xxxxx		xxxx	xxxx		685		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.8	xxxxx		xxxxx	xxxx		0.1		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		10.3	xxxxx		xxxxx	xxxx		10.5		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*	*		B		*	*	*			*	*	*		
ApproachDel:	10.3			13.2			xxxxxx			xxxxxx										
ApproachLOS:	B			B			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.398
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 29.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		32		32		10		31		31		10		32		32		10		31		31	
Lanes:	1	0	2	0	1		1	0	2	0	1		1	0	2	0	1		1	0	1	1	0	
Volume Module:																								
Base Vol:	67		113		121		115		103		92		49		274		46		151		383		33	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	67		113		121		115		103		92		49		274		46		151		383		33	
Added Vol:	0		8		16		8		6		10		12		12		0		11		9		6	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	67		121		137		123		109		102		61		286		46		162		392		39	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88	
PHF Volume:	76		137		155		139		123		115		69		324		52		183		444		44	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	76		137		155		139		123		115		69		324		52		183		444		44	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	76		137		155		139		123		115		69		324		52		183		444		44	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		2.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00		1.00		1.82		0.18	
Final Sat.:	1700		3600		1800		1700		3600		1800		1700		3600		1800		1700		3274		326	
Capacity Analysis Module:																								
Vol/Sat:	0.04		0.04		0.09		0.08		0.03		0.06		0.04		0.09		0.03		0.11		0.14		0.14	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.11		0.32		0.32		0.12		0.33		0.33		0.12		0.32		0.32		0.16		0.36		0.36	
Volume/Cap:	0.41		0.12		0.27		0.68		0.10		0.19		0.35		0.28		0.09		0.68		0.37		0.37	
Delay/Veh:	43.2		24.1		25.6		50.8		23.0		23.9		41.7		25.5		23.9		46.4		23.7		23.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	43.2		24.1		25.6		50.8		23.0		23.9		41.7		25.5		23.9		46.4		23.7		23.7	
LOS by Move:	D		C		C		D		C		C		D		C		C		D		C		C	
HCM2kAvgQ:	3		1		4		6		1		3		2		4		1		7		6		6	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 30.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 2 0 1			1 0 1 1 0		
Volume Module:												
Base Vol:	67	113	121	115	103	92	49	274	46	151	383	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	113	121	115	103	92	49	274	46	151	383	33
Added Vol:	0	8	16	8	6	10	12	12	0	11	9	6
PasserByVol:	0	5	0	10	5	0	39	-10	-2	0	0	0
Initial Fut:	67	126	137	133	114	102	100	276	44	162	392	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	143	155	151	129	115	113	312	50	183	444	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	143	155	151	129	115	113	312	50	183	444	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	143	155	151	129	115	113	312	50	183	444	44
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.82	0.18
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3274	326
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.09	0.09	0.04	0.06	0.07	0.09	0.03	0.11	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.12	0.32	0.32	0.15	0.36	0.36
Volume/Cap:	0.41	0.12	0.27	0.70	0.11	0.19	0.58	0.27	0.09	0.70	0.38	0.38
Delay/Veh:	43.0	24.1	25.6	51.8	22.8	23.6	46.1	25.4	23.8	48.4	24.0	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.0	24.1	25.6	51.8	22.8	23.6	46.1	25.4	23.8	48.4	24.0	24.0
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	4	6	1	3	4	4	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.451
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 30.1
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	115	169	206	125	97	108	87	318	37	116	417	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	169	206	125	97	108	87	318	37	116	417	57
Added Vol:	0	21	24	13	23	34	32	19	0	24	19	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	190	230	138	120	142	119	337	37	140	436	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	204	247	148	129	152	128	362	40	150	468	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	204	247	148	129	152	128	362	40	150	468	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	204	247	148	129	152	128	362	40	150	468	75
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3102	498
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.14	0.09	0.04	0.08	0.08	0.10	0.02	0.09	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.12	0.35	0.35	0.11	0.34	0.34	0.12	0.35	0.35
Volume/Cap:	0.65	0.17	0.41	0.72	0.10	0.24	0.67	0.30	0.07	0.72	0.43	0.43
Delay/Veh:	48.2	22.2	24.7	52.4	21.1	22.4	49.5	23.4	21.4	52.1	24.1	24.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.2	22.2	24.7	52.4	21.1	22.4	49.5	23.4	21.4	52.1	24.1	24.1
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	6	6	1	3	5	4	1	6	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.560
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	34.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	115	169	206	125	97	108	87	318	37	116	417	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	169	206	125	97	108	87	318	37	116	417	57
Added Vol:	0	21	24	13	23	34	32	19	0	24	19	13
PasserByVol:	0	27	0	19	44	0	85	-19	-2	0	0	0
Initial Fut:	115	217	230	157	164	142	204	318	35	140	436	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	123	233	247	168	176	152	219	341	38	150	468	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	233	247	168	176	152	219	341	38	150	468	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	233	247	168	176	152	219	341	38	150	468	75
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3102	498
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.14	0.10	0.05	0.08	0.13	0.09	0.02	0.09	0.15	0.15
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.16	0.36	0.36	0.11	0.31	0.31
Volume/Cap:	0.67	0.20	0.43	0.79	0.14	0.25	0.79	0.26	0.06	0.78	0.49	0.49
Delay/Veh:	51.8	24.8	27.3	59.6	23.1	24.2	53.8	22.7	20.9	61.8	28.4	28.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.8	24.8	27.3	59.6	23.1	24.2	53.8	22.7	20.9	61.8	28.4	28.4
LOS by Move:	D	C	C	E	C	C	D	C	C	E	C	C
HCM2kAvgQ:	5	3	6	7	2	3	9	4	1	7	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.381
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	65	300	150		19	208	70		34	47	28		83	93	26	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	65	300	150		19	208	70		34	47	28		83	93	26	
Added Vol:	0	18	0		0	13	4		6	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	65	318	150		19	221	74		40	47	28		83	93	26	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	79	388	183		23	269	90		49	57	34		101	113	32	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	79	388	183		23	269	90		49	57	34		101	113	32	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	79	388	183		23	269	90		49	57	34		101	113	32	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.47	0.53	1.00		0.42	0.45	0.13	
Final Sat.:	1700	1800	1800		1700	1800	1800		806	947	1800		722	809	226	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.22	0.10		0.01	0.15	0.05		0.06	0.06	0.02		0.14	0.14	0.14	
Crit Moves:		****												****		
Green/Cycle:	0.57	0.57	0.57		0.57	0.57	0.57		0.37	0.37	0.37		0.37	0.37	0.37	
Volume/Cap:	0.08	0.38	0.18		0.02	0.26	0.09		0.16	0.16	0.05		0.38	0.38	0.38	
Delay/Veh:	6.0	7.5	6.4		5.8	6.8	6.0		12.9	12.9	12.3		14.3	14.3	14.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.0	7.5	6.4		5.8	6.8	6.0		12.9	12.9	12.3		14.3	14.3	14.3	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	4	2		0	3	1		1	1	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	56	436	237	18	108	96	29	38	19	54	53	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	436	237	18	108	96	29	38	19	54	53	36
Added Vol:	0	36	0	0	37	10	10	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	472	237	18	145	106	39	38	19	54	53	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	63	534	268	20	164	120	44	43	21	61	60	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	534	268	20	164	120	44	43	21	61	60	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	534	268	20	164	120	44	43	21	61	60	41
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.52	0.48	1.00	0.39	0.36	0.25
Final Sat.:	1700	1800	1800	1700	1800	1800	885	863	1800	665	653	443
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.15	0.01	0.09	0.07	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.06	0.51	0.26	0.02	0.16	0.11	0.14	0.14	0.03	0.26	0.26	0.26
Delay/Veh:	5.4	7.8	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.8	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	3	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	3	0	6	2	0	0	0	474	2	10	666	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	6	2	0	0	0	474	2	10	666	1
Added Vol:	9	0	4	4	0	3	4	28	12	12	27	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	0	10	6	0	3	4	502	14	22	693	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	15	0	12	7	0	4	5	614	17	27	848	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	0	12	7	0	4	5	614	17	27	848	7
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1531	1533	614	1540	1543	848	855	xxxx	xxxxx	631	xxxx	xxxxx
Potent Cap.:	97	118	495	95	116	364	793	xxxx	xxxxx	961	xxxx	xxxxx
Move Cap.:	93	114	495	90	112	364	793	xxxx	xxxxx	961	xxxx	xxxxx
Total Cap:	213	232	xxxxx	209	228	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	0.00	0.02	0.04	0.00	0.01	0.01	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx	8.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	288	xxxxx	xxxx	244	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	18.8	xxxxx	xxxxx	20.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	18.8			20.5			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[23.2]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	10	0	8			7	0	2			3	715	3			14	554	4		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	10	0	8			7	0	2			3	715	3			14	554	4		
Added Vol:	19	0	10			8	0	6			6	64	19			19	62	8		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	29	0	18			15	0	8			9	779	22			33	616	12		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.94	0.94	0.94			0.94	0.94	0.94			0.94	0.94	0.94			0.94	0.94	0.94		
PHF Volume:	31	0	19			16	0	9			10	831	23			35	657	13		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	31	0	19			16	0	9			10	831	23			35	657	13		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1589	1591	831			1600	1602	657			670	xxxx	xxxxx			855	xxxx	xxxxx		
Potent Cap.:	88	108	372			86	107	468			930	xxxx	xxxxx			793	xxxx	xxxxx		
Move Cap.:	83	103	372			79	101	468			930	xxxx	xxxxx			793	xxxx	xxxxx		
Total Cap:	204	223	xxxxx			189	213	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.15	0.00	0.05			0.08	0.00	0.02			0.01	xxxx	xxxx			0.04	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.9	xxxx	xxxxx			9.7	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		247	xxxxx		xxxx		238	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.7	xxxxx		xxxxx		0.3	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		23.2	xxxxx		xxxxx		21.9	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		C	*		*	*	*			*	*	*		
ApproachDel:	23.2					21.9					xxxxxx					xxxxxx				
ApproachLOS:	C					C					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[14.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	580	0
Added Vol:	11	0	7	0	0	0	0	20	15	11	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	7	0	0	0	0	450	15	11	614	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	13	0	8	0	0	0	0	512	17	13	698	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	0	8	0	0	0	0	512	17	13	698	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1235	1235	512	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	529	xxxx	xxxxx
Potent Cap.:	197	178	566	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1049	xxxx	xxxxx
Move Cap.:	195	176	566	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1049	xxxx	xxxxx
Total Cap:	331	297	xxxxx	277	291	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	395	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		14.6		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[19.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	650	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	650	0	0	580	0
Added Vol:	24	0	17	0	0	0	0	57	24	17	65	0
PasserByVol:	19	0	3	0	0	0	0	0	18	2	0	0
Initial Fut:	43	0	20	0	0	0	0	707	42	19	645	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	45	0	21	0	0	0	0	748	44	20	682	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	45	0	21	0	0	0	0	748	44	20	682	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1470	1470	748	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	792	xxxx	xxxxx
Potent Cap.:	142	128	416	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	837	xxxx	xxxxx
Move Cap.:	139	125	416	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	837	xxxx	xxxxx
Total Cap:	279	250	xxxxx	215	237	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.16	0.00	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	311	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		19.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: C[24.8]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		0 0 1! 0	0		1 0	1	0	1	1 0	0	1	0
Volume Module:														
Base Vol:	8	1	21	16	3	31	19	393	22		15	561	14	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	8	1	21	16	3	31	19	393	22		15	561	14	
Added Vol:	3	1	4	0	2	1	1	25	2		0	40	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	11	2	25	16	5	32	20	418	24		15	601	14	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	12	2	28	18	6	36	23	471	27		17	677	16	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	12	2	28	18	6	36	23	471	27		17	677	16	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1256	1243	471	1264	1262	685	693	xxxx	xxxxx		498	xxxx	xxxxx	
Potent Cap.:	150	176	597	148	171	451	912	xxxx	xxxxx		1076	xxxx	xxxxx	
Move Cap.:	130	169	597	135	165	451	912	xxxx	xxxxx		1076	xxxx	xxxxx	
Volume/Cap:	0.10	0.01	0.05	0.13	0.03	0.08	0.02	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx		8.4	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	275	xxxxx	xxxx	241	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	20.5	xxxxx	xxxxx	24.8	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	20.5			24.8			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.438
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	13.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted					Permitted					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	19		19		19	19		19		19	10		32		32	10		32		32
Lanes:	1	0	0	1	0	1	0	0	1	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	8		1		21	16		3		31	19		393		22	15		561		14
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	8		1		21	16		3		31	19		393		22	15		561		14
Added Vol:	3		1		4	0		2		1	1		25		2	0		40		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	11		2		25	16		5		32	20		418		24	15		601		14
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.89		0.89		0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89		0.89		0.89
PHF Volume:	12		2		28	18		6		36	23		471		27	17		677		16
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	12		2		28	18		6		36	23		471		27	17		677		16
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
FinalVolume:	12		2		28	18		6		36	23		471		27	17		677		16
Saturation Flow Module:																				
Sat/Lane:	1800		1800		1800	1800		1800		1800	1800		1800		1800	1800		1800		1800
Adjustment:	0.94		1.00		1.00	0.94		1.00		1.00	0.94		1.00		1.00	0.94		1.00		1.00
Lanes:	1.00		0.07		0.93	1.00		0.14		0.86	1.00		1.00		1.00	1.00		1.00		1.00
Final Sat.:	1700		133		1667	1700		243		1557	1700		1800		1800	1700		1800		1800
Capacity Analysis Module:																				
Vol/Sat:	0.01		0.02		0.02	0.01		0.02		0.02	0.01		0.26		0.02	0.01		0.38		0.01
Crit Moves:								****			****							****		
Green/Cycle:	0.18		0.18		0.18	0.18		0.18		0.18	0.10		0.58		0.58	0.18		0.67		0.67
Volume/Cap:	0.04		0.09		0.09	0.06		0.13		0.13	0.14		0.45		0.03	0.05		0.56		0.01
Delay/Veh:	35.5		35.9		35.9	35.7		36.2		36.2	43.9		12.8		9.4	35.6		10.0		5.9
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	35.5		35.9		35.9	35.7		36.2		36.2	43.9		12.8		9.4	35.6		10.0		5.9
LOS by Move:	D		D		D	D		D		D	D		B		A	D		A		A
HCM2kAvgQ:	0		1		1	1		1		1	1		9		0	0		12		0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: E[50.0]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	0	1	0
Volume Module:																				
Base Vol:	19	0	21	25	0	24	38	594	15	25	545	22								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	19	0	21	25	0	24	38	594	15	25	545	22								
Added Vol:	5	2	10	0	2	3	3	67	5	0	75	0								
PasserByVol:	0	0	0	0	0	2	3	0	16	15	0	0								
Initial Fut:	24	2	31	25	2	29	44	661	36	40	620	22								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	25	2	33	26	2	31	46	696	38	42	652	23								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	25	2	33	26	2	31	46	696	38	42	652	23								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1553	1548	696	1573	1574	664	676	xxxx	xxxxx	734	xxxx	xxxxx								
Potent Cap.:	93	115	445	90	111	464	925	xxxx	xxxxx	881	xxxx	xxxxx								
Move Cap.:	79	104	445	76	100	464	925	xxxx	xxxxx	881	xxxx	xxxxx								
Volume/Cap:	0.32	0.02	0.07	0.34	0.02	0.07	0.05	xxxx	xxxx	0.05	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.2	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.3	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		146	xxxxx		xxxx		137	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.8	xxxxx		xxxxx		1.9	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		45.9	xxxxx		xxxxx		50.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*		*		E	*		*	*	*		*	*	*			
ApproachDel:	45.9					50.0					xxxxxx					xxxxxx				
ApproachLOS:	E					E					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	125	Critical Vol./Cap.(X):	0.468
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	19	0	21	25	0	24	38	594	15	25	545	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	0	21	25	0	24	38	594	15	25	545	22
Added Vol:	5	2	10	0	2	3	3	67	5	0	75	0
PasserByVol:	0	0	0	0	0	2	3	0	16	15	0	0
Initial Fut:	24	2	31	25	2	29	44	661	36	40	620	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	2	33	26	2	31	46	696	38	42	652	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	2	33	26	2	31	46	696	38	42	652	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	2	33	26	2	31	46	696	38	42	652	23
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.44	0.03	0.53	0.46	0.03	0.51	1.00	1.00	1.00	1.00	0.97	0.03
Final Sat.:	740	62	955	783	63	908	1700	1800	1800	1700	1738	62
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.39	0.02	0.02	0.38	0.38
Crit Moves:		****						****		****		
Green/Cycle:	0.15	0.15	0.15	0.15	0.15	0.15	0.14	0.72	0.72	0.08	0.66	0.66
Volume/Cap:	0.22	0.22	0.22	0.22	0.22	0.22	0.19	0.54	0.03	0.31	0.57	0.57
Delay/Veh:	47.0	47.0	47.0	46.9	46.9	46.9	47.9	8.4	5.0	55.5	12.3	12.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.0	47.0	47.0	46.9	46.9	46.9	47.9	8.4	5.0	55.5	12.3	12.3
LOS by Move:	D	D	D	D	D	D	D	A	A	E	B	B
HCM2kAvgQ:	2	2	2	2	2	2	2	12	0	2	14	14

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: A[8.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	30	0	0	40	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	30	0	0	40	0	0	0	0	0	0	0
Added Vol:	9	3	0	0	2	2	6	0	6	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	33	0	0	42	2	6	0	6	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	11	41	0	0	52	2	7	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	41	0	0	52	2	7	0	7	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	54	xxxx	xxxxx	xxxx	xxxx	xxxxx	116	116	53	xxxx	xxxx	xxxxx
Potent Cap.:	1564	xxxx	xxxxx	xxxx	xxxx	xxxxx	885	778	1020	xxxx	xxxx	xxxxx
Move Cap.:	1564	xxxx	xxxxx	xxxx	xxxx	xxxxx	880	772	1020	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	945	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.9			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: A[9.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 40	0		0 40	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 40	0		0 40	0		0 0	0		0 0	0	
Added Vol:	15 5	0		0 5	2		12 0	14		0 0	0	
PasserByVol:	6 0	0		0 0	17		19 0	7		0 0	0	
Initial Fut:	21 45	0		0 45	19		31 0	21		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85	
PHF Volume:	25 53	0		0 53	22		36 0	25		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	25 53	0		0 53	22		36 0	25		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2 xxxx xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		
Capacity Module:												
Cnflict Vol:	75 xxxx xxxxx	xxxx	xxxx	xxxxx	166	166	64	xxxx	xxxx	xxxxx		
Potent Cap.:	1537 xxxx xxxxx	xxxx	xxxx	xxxxx	829	730	1006	xxxx	xxxx	xxxxx		
Move Cap.:	1537 xxxx xxxxx	xxxx	xxxx	xxxxx	818	718	1006	xxxx	xxxx	xxxxx		
Volume/Cap:	0.02 xxxx xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.02	xxxx	xxxx	xxxx		
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	7.4 xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	A *	*	*	*	*	*	*	*	*	*		
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT						
Shared Cap.:	xxxx xxxx xxxxx	xxxx	xxxx	xxxxx	xxxx	885	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	0.0 xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx		
Shrd ConDel:	7.4 xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.4	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	A *	*	*	*	*	*	A	*	*	*		
ApproachDel:	xxxxxx	xxxxxx			9.4	xxxxxx						
ApproachLOS:	*	*			A	*						

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.412
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	10		16		192		62		39		100		41		353		8		109		460		33	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10		16		192		62		39		100		41		353		8		109		460		33	
Added Vol:	6		0		0		0		0		13		9		15		4		0		21		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	16		16		192		62		39		113		50		368		12		109		481		33	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	20		20		235		76		48		138		61		451		15		134		589		40	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	20		20		235		76		48		138		61		451		15		134		589		40	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	20		20		235		76		48		138		61		451		15		134		589		40	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.13		0.04		0.03		0.08		0.04		0.13		0.01		0.08		0.16		0.02	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.11		0.40		0.40		0.14		0.43		0.43	
Volume/Cap:	0.12		0.04		0.47		0.45		0.09		0.27		0.33		0.31		0.02		0.56		0.38		0.05	
Delay/Veh:	41.3		26.2		30.5		44.3		26.7		28.4		42.3		20.7		18.2		43.2		19.4		16.5	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.3		26.2		30.5		44.3		26.7		28.4		42.3		20.7		18.2		43.2		19.4		16.5	
LOS by Move:	D		C		C		D		C		C		D		C		B		D		B		B	
HCM2kAvgQ:	1		0		6		3		1		3		2		5		0		5		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.402
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	19	54	195	59	32	50	115	507	14	84	451	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	54	195	59	32	50	115	507	14	84	451	61
Added Vol:	12	0	0	0	0	23	23	42	12	0	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	54	195	59	32	73	138	549	26	84	491	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	32	55	200	61	33	75	142	564	27	86	504	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	55	200	61	33	75	142	564	27	86	504	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	55	200	61	33	75	142	564	27	86	504	63
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.04	0.08	0.16	0.01	0.05	0.14	0.03
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.19	0.11	0.40	0.36	0.07	0.15	0.60	0.36	0.03	0.47	0.35	0.09
Delay/Veh:	41.8	26.8	29.7	43.3	26.5	27.2	44.4	19.3	16.4	43.8	21.1	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.8	26.8	29.7	43.3	26.5	27.2	44.4	19.3	16.4	43.8	21.1	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	2	5	6	0	3	5	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: E[42.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25	2	33	6	1	6	4	602	20	18	601	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	25	2	33	6	1	6	4	602	20	18	601	8												
Added Vol:	3	0	0	0	0	0	0	13	2	0	18	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	28	2	33	6	1	6	4	615	22	18	619	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	33	2	38	7	1	7	5	714	26	21	719	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	33	2	38	7	1	7	5	714	26	21	719	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1493	1494	714	1517	1510	719	728	xxxx	xxxxx	740	xxxx	xxxxx												
Potent Cap.:	103	124	434	99	122	432	885	xxxx	xxxxx	876	xxxx	xxxxx												
Move Cap.:	98	121	434	87	118	432	885	xxxx	xxxxx	876	xxxx	xxxxx												
Volume/Cap:	0.33	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	167	xxxxx	xxxx	142	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	2.0	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	42.6	xxxxx	xxxxx	33.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	E	*	*	D	*	*	*	*	*	*	*												
ApproachDel:	42.6			33.4			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[20.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	25	2	33	6	1	6	4	602	20		18	601		8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	25	2	33	6	1	6	4	602	20		18	601		8
Added Vol:	3	0	0	0	0	0	0	13	2		0	18		0
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1		0	0		0
Initial Fut:	28	0	35	0	0	13	0	625	23		18	619		8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86		0.86
PHF Volume:	33	0	41	0	0	15	0	726	27		21	719		9
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0		0
FinalVolume:	33	0	41	0	0	15	0	726	27		21	719		9
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx		4.1	xxxx		xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx		xxxxx
Capacity Module:														
Cnflict Vol:	1499	1496	726	1520	1513	719	xxxx	xxxx	xxxxx		753	xxxx		xxxxx
Potent Cap.:	102	124	428	98	121	432	xxxx	xxxx	xxxxx		866	xxxx		xxxxx
Move Cap.:	96	121	428	87	118	432	xxxx	xxxx	xxxxx		866	xxxx		xxxxx
Total Cap:	224	246	xxxxx	206	238	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx
Volume/Cap:	0.15	0.00	0.09	0.00	0.00	0.03	xxxx	xxxx	xxxx		0.02	xxxx		xxxx
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx		xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.3	xxxx		xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*		*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR		RT
Shared Cap.:	xxxx	304	xxxxx	xxxx	432	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx
Shrd ConDel:	xxxxx	20.5	xxxxx	xxxxx	13.6	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx
Shared LOS:	*	C	*	*	B	*	*	*	*		*	*		*
ApproachDel:	20.5			13.6			xxxxxx				xxxxxx			
ApproachLOS:	C			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: E[48.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30	0	20				7	2	11				10	683	53				39	580	8			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	30	0	20				7	2	11				10	683	53				39	580	8			
Added Vol:	5	0	0				0	0	0				0	37	5				0	36	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	35	0	20				7	2	11				10	720	58				39	616	8			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	36	0	20				7	2	11				10	731	59				40	625	8			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	36	0	20				7	2	11				10	731	59				40	625	8			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1466	1463	731				1495	1514	625				633	xxxx	xxxxx				790	xxxx	xxxxx			
Potent Cap.:	107	130	425				102	121	488				959	xxxx	xxxxx				839	xxxx	xxxxx			
Move Cap.:	99	122	425				93	114	488				959	xxxx	xxxxx				839	xxxx	xxxxx			
Volume/Cap:	0.36	0.00	0.05				0.08	0.02	0.02				0.01	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	xxxxx				9.5	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		137	xxxxx			xxxx		174	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.8	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		48.2	xxxxx			xxxxx		28.5	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	48.2						28.5						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2019) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[21.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		683		53		39		580		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		683		53		39		580		8	
Added Vol:	5		0		0		0		0		0		0		37		5		0		36		0	
PasserByVol:	0		0		0		-7		-2		9		-10		17		2		0		0		0	
Initial Fut:	35		0		20		0		0		20		0		737		60		39		616		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	36		0		20		0		0		20		0		748		61		40		625		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	36		0		20		0		0		20		0		748		61		40		625		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1466		1460		748		1493		1513		625		xxxx		xxxx		xxxxx		809		xxxx		xxxxx	
Potent Cap.:	107		130		416		103		121		488		xxxx		xxxx		xxxxx		826		xxxx		xxxxx	
Move Cap.:	99		124		416		94		115		488		xxxx		xxxx		xxxxx		826		xxxx		xxxxx	
Total Cap:	226		248		xxxxx		209		228		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.16		0.00		0.05		0.00		0.00		0.04		xxxx		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.2		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.6		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		271		xxxxx		xxxx		488		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.8		xxxxx		xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		21.7		xxxxx		xxxxx		12.7		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		B		*		*		*		*		*		*		*	
ApproachDel:	21.7						12.7						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

Opening Year (2020) Without Project

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.405
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	1 0	0	1	0	1 0	0	1	1	0	1 0	1	1	0	0 1	0
Volume Module:																
Base Vol:	16	4	65		12	28	0		5	278	30		202	215	11	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	16	4	65		12	28	0		5	278	30		202	215	11	
Added Vol:	0	0	3		0	0	0		0	12	0		2	10	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	16	4	68		12	28	0		5	290	30		204	225	11	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	18	5	78		14	32	0		6	331	34		233	257	13	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	18	5	78		14	32	0		6	331	34		233	257	13	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	18	5	78		14	32	0		6	331	34		233	257	13	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	0.81	0.19	1.00		0.31	0.69	1.00		1.00	1.00	1.00		1.00	0.95	0.05	
Final Sat.:	1375	344	1800		531	1238	1800		1700	1800	1800		1700	1716	84	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.01	0.04		0.03	0.03	0.00		0.00	0.18	0.02		0.14	0.15	0.15	
Crit Moves:			****							****			****			
Green/Cycle:	0.11	0.11	0.11		0.11	0.11	0.00		0.02	0.45	0.45		0.34	0.78	0.78	
Volume/Cap:	0.12	0.12	0.40		0.24	0.24	0.00		0.19	0.40	0.04		0.40	0.19	0.19	
Delay/Veh:	24.6	24.6	26.4		25.2	25.2	0.0		32.2	11.3	9.1		15.7	1.8	1.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	24.6	24.6	26.4		25.2	25.2	0.0		32.2	11.3	9.1		15.7	1.8	1.8	
LOS by Move:	C	C	C		C	C	A		C	B	A		B	A	A	
HCM2kAvgQ:	1	1	2		1	1	0		0	4	0		4	1	1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	10.8
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	21	13	45	11	6	2	4	264	26	240	279	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	45	11	6	2	4	264	26	240	279	23
Added Vol:	0	0	5	0	0	0	0	32	0	5	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	50	11	6	2	4	296	26	245	313	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	26	16	61	13	7	2	5	362	32	300	383	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	16	61	13	7	2	5	362	32	300	383	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	16	61	13	7	2	5	362	32	300	383	28
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.63	0.37	1.00	0.66	0.34	1.00	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	1073	664	1800	1122	612	1800	1700	1800	1800	1700	1677	123
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.03	0.01	0.01	0.00	0.00	0.20	0.02	0.18	0.23	0.23
Crit Moves:			****					****		****		
Green/Cycle:	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.44	0.44	0.39	0.82	0.82
Volume/Cap:	0.32	0.32	0.46	0.16	0.16	0.02	0.28	0.46	0.04	0.46	0.28	0.28
Delay/Veh:	27.8	27.8	29.1	26.6	26.6	25.8	38.1	12.2	9.6	14.3	1.4	1.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	27.8	29.1	26.6	26.6	25.8	38.1	12.2	9.6	14.3	1.4	1.4
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1				1 0 2 0 1			
Volume Module:														
Base Vol:	41	5	43	14	3	17	17	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43	14	3	17	17	310	39		26	416	32	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	41	5	43	14	3	17	17	325	39		26	428	32	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	50	6	53	17	4	21	21	399	48		32	526	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	50	6	53	17	4	21	21	399	48		32	526	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	769	1070	200	834	1078	263	565	xxxx	xxxxx		447	xxxx	xxxxx	
Potent Cap.:	294	223	814	264	220	742	1017	xxxx	xxxxx		1124	xxxx	xxxxx	
Move Cap.:	272	212	814	233	210	742	1017	xxxx	xxxxx		1124	xxxx	xxxxx	
Volume/Cap:	0.19	0.03	0.06	0.07	0.02	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	21.7	xxxx	xxxxx	8.6	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	391	xxxxx	xxxx	xxxx	537	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	17.7	xxxxx	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	17.7			16.0			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	90	27	82	27	39	30	31	263	37		57	461	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	27	82	27	39	30	31	263	37		57	461	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-90	-27	90	-27	-39	0	0	0	0		0	90	0	
Initial Fut:	0	0	172	0	0	30	31	299	37		57	590	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	182	0	0	32	33	316	39		60	623	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	182	0	0	32	33	316	39		60	623	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	813	1222	158	967	1164	312	720	xxxx	xxxxx		355	xxxx	xxxxx	
Potent Cap.:	273	181	866	212	196	690	891	xxxx	xxxxx		1215	xxxx	xxxxx	
Move Cap.:	244	166	866	156	180	690	891	xxxx	xxxxx		1215	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	866	xxxxx	xxxx	xxxx	690	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			10.5			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	43	14	3	17	17	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43	14	3	17	17	310	39		26	416	32	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	84	0	0	17	17	325	39		26	469	32	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	103	0	0	21	21	399	48		32	576	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	103	0	0	21	21	399	48		32	576	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	793	1120	200	881	1129	288	615	xxxx	xxxxx		447	xxxx	xxxxx	
Potent Cap.:	283	208	814	244	206	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Move Cap.:	264	198	814	205	196	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.00	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	814	xxxxx	xxxx	xxxx	715	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			10.2			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.2 Worst Case Level Of Service: E[39.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	90	27	82	27	39	30	31	263	37	57	461	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	27	82	27	39	30	31	263	37	57	461	92
Added Vol:	0	0	0	0	0	0	0	36	0	0	39	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	27	82	27	39	30	31	299	37	57	500	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	95	29	87	29	41	32	33	316	39	60	528	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	95	29	87	29	41	32	33	316	39	60	528	97
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	786	1127	158	886	1069	264	625	xxxx	xxxxx	355	xxxx	xxxxx
Potent Cap.:	286	206	866	242	223	740	966	xxxx	xxxxx	1215	xxxx	xxxxx
Move Cap.:	217	189	866	181	205	740	966	xxxx	xxxxx	1215	xxxx	xxxxx
Volume/Cap:	0.44	0.15	0.10	0.16	0.20	0.04	0.03	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	28.6	xxxx	xxxxx	8.9	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	306	xxxxx	xxxx	xxxx	299	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	4.7	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	39.1	xxxxx	xxxxx	xxxx	20.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	C	*	*	*	*	*	*
ApproachDel:	39.1			23.0			xxxxxx			xxxxxx		
ApproachLOS:	E			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.381
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.4
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	68	113	123	115	102	92	49	279	45	153	393	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	113	123	115	102	92	49	279	45	153	393	34
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	121	126	117	108	102	61	282	45	155	395	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	137	143	132	122	115	69	319	51	175	447	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	137	143	132	122	115	69	319	51	175	447	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	137	143	132	122	115	69	319	51	175	447	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3307	293
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.08	0.08	0.03	0.06	0.04	0.09	0.03	0.10	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.11	0.33	0.33	0.12	0.34	0.34	0.14	0.36	0.36
Volume/Cap:	0.42	0.11	0.24	0.74	0.10	0.19	0.35	0.26	0.08	0.75	0.38	0.38
Delay/Veh:	41.2	21.8	22.9	56.3	21.8	22.7	39.8	23.0	21.6	52.5	22.8	22.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.2	21.8	22.9	56.3	21.8	22.7	39.8	23.0	21.6	52.5	22.8	22.8
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	1	3	6	1	2	2	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.383
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	68	113	123	115	102	92	49	279	45	153	393	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	113	123	115	102	92	49	279	45	153	393	34
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	5	0	10	5	0	39	-10	-2	0	0	0
Initial Fut:	68	126	126	127	113	102	100	272	43	155	395	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	143	143	144	128	115	113	308	49	175	447	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	143	143	144	128	115	113	308	49	175	447	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	143	143	144	128	115	113	308	49	175	447	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3307	293
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.08	0.08	0.04	0.06	0.07	0.09	0.03	0.10	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.12	0.32	0.32	0.15	0.36	0.36
Volume/Cap:	0.42	0.12	0.25	0.67	0.11	0.19	0.58	0.27	0.08	0.67	0.38	0.38
Delay/Veh:	43.1	24.1	25.3	49.7	22.8	23.6	46.1	25.4	23.8	46.5	24.0	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.1	24.1	25.3	49.7	22.8	23.6	46.1	25.4	23.8	46.5	24.0	24.0
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	3	6	1	3	4	4	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.1
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	114	170	213	127	96	109	87	319	36	118	421	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	170	213	127	96	109	87	319	36	118	421	56
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	191	218	130	119	143	119	324	36	123	426	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	122	205	234	139	128	153	128	348	39	132	457	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	205	234	139	128	153	128	348	39	132	457	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	205	234	139	128	153	128	348	39	132	457	63
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3162	438
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.08	0.04	0.09	0.08	0.10	0.02	0.08	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.65	0.16	0.37	0.75	0.10	0.25	0.67	0.28	0.06	0.71	0.42	0.42
Delay/Veh:	46.7	20.8	22.9	55.9	20.5	21.8	48.5	21.8	20.0	52.0	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.7	20.8	22.9	55.9	20.5	21.8	48.5	21.8	20.0	52.0	23.3	23.3
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	5	6	1	3	5	4	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.540
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 33.1
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	114	170	213	127	96	109	87	319	36	118	421	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	170	213	127	96	109	87	319	36	118	421	56
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	27	0	19	44	0	85	-19	-2	0	0	0
Initial Fut:	114	218	218	149	163	143	204	305	34	123	426	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	122	234	234	160	175	153	219	327	36	132	457	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	234	234	160	175	153	219	327	36	132	457	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	234	234	160	175	153	219	327	36	132	457	63
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3162	438
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.09	0.05	0.09	0.13	0.09	0.02	0.08	0.14	0.14
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.17	0.36	0.36	0.11	0.31	0.31
Volume/Cap:	0.67	0.20	0.41	0.77	0.15	0.25	0.77	0.25	0.06	0.68	0.47	0.47
Delay/Veh:	51.9	24.8	27.0	58.3	23.3	24.4	51.7	22.4	20.7	52.2	28.1	28.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.9	24.8	27.0	58.3	23.3	24.4	51.7	22.4	20.7	52.2	28.1	28.1
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	3	6	7	2	3	9	4	1	5	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.378
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	65	301	150	18	214	68	34	46	30	86	93	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	301	150	18	214	68	34	46	30	86	93	25
Added Vol:	0	11	0	0	9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	312	150	18	223	68	34	46	30	86	93	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	79	380	183	22	272	83	41	56	37	105	113	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	380	183	22	272	83	41	56	37	105	113	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	380	183	22	272	83	41	56	37	105	113	30
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.44	0.56	1.00	0.44	0.44	0.12
Final Sat.:	1700	1800	1800	1700	1800	1800	746	1010	1800	740	801	215
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.10	0.01	0.15	0.05	0.06	0.06	0.02	0.14	0.14	0.14
Crit Moves:		****									****	
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.08	0.38	0.18	0.02	0.27	0.08	0.15	0.15	0.05	0.38	0.38	0.38
Delay/Veh:	6.2	7.6	6.6	5.9	7.0	6.2	12.5	12.5	12.0	14.0	14.0	14.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.2	7.6	6.6	5.9	7.0	6.2	12.5	12.5	12.0	14.0	14.0	14.0
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	4	2	0	3	1	1	1	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.415
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	56	444	235		19	110	100		29	38	19		53	52	38	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	56	444	235		19	110	100		29	38	19		53	52	38	
Added Vol:	0	26	0		0	27	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	56	470	235		19	137	100		29	38	19		53	52	38	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	63	531	266		21	155	113		33	43	21		60	59	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	63	531	266		21	155	113		33	43	21		60	59	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	63	531	266		21	155	113		33	43	21		60	59	43	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.45	0.55	1.00		0.38	0.36	0.26	
Final Sat.:	1700	1800	1800		1700	1800	1800		760	996	1800		653	641	468	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.30	0.15		0.01	0.09	0.06		0.04	0.04	0.01		0.09	0.09	0.09	
Crit Moves:		****												****		
Green/Cycle:	0.58	0.58	0.58		0.58	0.58	0.58		0.35	0.35	0.35		0.35	0.35	0.35	
Volume/Cap:	0.06	0.51	0.25		0.02	0.15	0.11		0.12	0.12	0.03		0.26	0.26	0.26	
Delay/Veh:	5.4	7.8	6.2		5.3	5.8	5.6		13.3	13.3	12.9		14.2	14.2	14.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	5.4	7.8	6.2		5.3	5.8	5.6		13.3	13.3	12.9		14.2	14.2	14.2	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	6	3		0	1	1		1	1	0		2	2	2	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.6]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	676	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	676	1	
Added Vol:	0	0	0	4	0	3	4	12	0		0	17	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	486	2		10	693	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	594	2		12	848	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	594	2		12	848	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1482	1484	594	1481	1479	848	855	xxxx	xxxxx		597	xxxx	xxxxx	
Potent Cap.:	104	126	508	105	127	364	793	xxxx	xxxxx		990	xxxx	xxxxx	
Move Cap.:	102	124	508	102	125	364	793	xxxx	xxxxx		990	xxxx	xxxxx	
Total Cap:	225	243	xxxxx	225	244	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	358	xxxxx	xxxx	258	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.4	xxxxx	xxxxx	19.6	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.4			19.6			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 0 1				1 0 1 0 1			
Volume Module:														
Base Vol:	10	0	8	7	0	2	3	725	3		14	554	4	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	10	0	8	7	0	2	3	725	3		14	554	4	
Added Vol:	0	0	0	8	0	6	6	40	0		0	38	8	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	10	0	8	15	0	8	9	765	3		14	592	12	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	11	0	9	16	0	9	10	817	3		15	632	13	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	11	0	9	16	0	9	10	817	3		15	632	13	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1508	1510	817	1503	1501	632	645	xxxx	xxxxx		820	xxxx	xxxxx	
Potent Cap.:	100	121	380	101	123	484	950	xxxx	xxxxx		818	xxxx	xxxxx	
Move Cap.:	96	118	380	97	120	484	950	xxxx	xxxxx		818	xxxx	xxxxx	
Total Cap:	221	240	xxxxx	218	238	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.05	0.00	0.02	0.07	0.00	0.02	0.01	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		9.5	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	272	xxxxx	xxxx	269	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	19.3	xxxxx	xxxxx	19.7	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	19.3			19.7			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: C[24.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	7	1	22				17	4	29				19	392	26				20	564	14			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	7	1	22				17	4	29				19	392	26				20	564	14			
Added Vol:	3	0	0				0	0	0				0	14	2				0	19	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	10	1	22				17	4	29				19	406	28				20	583	14			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89			
PHF Volume:	11	1	25				19	5	33				21	458	32				23	657	16			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	11	1	25				19	5	33				21	458	32				23	657	16			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1229	1218	458				1239	1242	665				673	xxxx	xxxxx				489	xxxx	xxxxx			
Potent Cap.:	156	182	607				154	176	464				928	xxxx	xxxxx				1085	xxxx	xxxxx			
Move Cap.:	137	174	607				142	169	464				928	xxxx	xxxxx				1085	xxxx	xxxxx			
Volume/Cap:	0.08	0.01	0.04				0.14	0.03	0.07				0.02	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				8.4	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		288	xxxxx			xxxx		243	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.4	xxxxx			xxxxx		0.9	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		19.4	xxxxx			xxxxx		24.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	19.4						24.3						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.422
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	13.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	7	1	22	17	4	29	19	392	26	20	564	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	1	22	17	4	29	19	392	26	20	564	14
Added Vol:	3	0	0	0	0	0	0	14	2	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	1	22	17	4	29	19	406	28	20	583	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	11	1	25	19	5	33	21	458	32	23	657	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1	25	19	5	33	21	458	32	23	657	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	1	25	19	5	33	21	458	32	23	657	16
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.04	0.96	1.00	0.12	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	78	1722	1700	218	1582	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.25	0.02	0.01	0.37	0.01
Crit Moves:					****		****				****	
Green/Cycle:	0.18	0.18	0.18	0.18	0.18	0.18	0.10	0.58	0.58	0.18	0.67	0.67
Volume/Cap:	0.04	0.08	0.08	0.06	0.11	0.11	0.13	0.44	0.03	0.07	0.55	0.01
Delay/Veh:	35.5	35.8	35.8	35.7	36.1	36.1	43.9	12.7	9.4	35.8	9.7	5.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.5	35.8	35.8	35.7	36.1	36.1	43.9	12.7	9.4	35.8	9.7	5.9
LOS by Move:	D	D	D	D	D	D	D	B	A	D	A	A
HCM2kAvgQ:	0	1	1	1	1	1	1	8	0	1	11	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: E[40.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	20	0	20				25	0	25				39	605	16				24	555	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	20	0	20				25	0	25				39	605	16				24	555	21			
Added Vol:	5	0	0				0	0	0				0	43	5				0	41	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	25	0	20				25	0	25				39	648	21				24	596	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	26	0	21				26	0	26				41	682	22				25	627	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	26	0	21				26	0	26				41	682	22				25	627	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1466	1464	682				1474	1475	638				649	xxxx	xxxxx				704	xxxx	xxxxx			
Potent Cap.:	107	130	453				106	128	480				946	xxxx	xxxxx				903	xxxx	xxxxx			
Move Cap.:	96	121	453				95	119	480				946	xxxx	xxxxx				903	xxxx	xxxxx			
Volume/Cap:	0.27	0.00	0.05				0.28	0.00	0.05				0.04	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.1	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		148	xxxxx			xxxx		159	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.3	xxxxx			xxxxx		1.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		40.5	xxxxx			xxxxx		38.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		E	*			*	*	*				*	*	*			
ApproachDel:	40.5						38.4						xxxxxx						xxxxxx					
ApproachLOS:	E						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.444
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 14.2
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	20	0	20	25	0	25	39	605	16	24	555	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	0	20	25	0	25	39	605	16	24	555	21
Added Vol:	5	0	0	0	0	0	0	43	5	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	0	20	25	0	25	39	648	21	24	596	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	26	0	21	26	0	26	41	682	22	25	627	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	0	21	26	0	26	41	682	22	25	627	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	0	21	26	0	26	41	682	22	25	627	22
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.57	0.00	0.43	0.51	0.00	0.49	1.00	1.00	1.00	1.00	0.97	0.03
Final Sat.:	968	0	775	874	0	874	1700	1800	1800	1700	1739	61
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.03	0.00	0.03	0.02	0.38	0.01	0.01	0.36	0.36
Crit Moves:				****				****		****		
Green/Cycle:	0.15	0.00	0.15	0.15	0.00	0.15	0.14	0.73	0.73	0.08	0.67	0.67
Volume/Cap:	0.19	0.00	0.19	0.21	0.00	0.21	0.17	0.52	0.02	0.19	0.54	0.54
Delay/Veh:	49.1	0.0	49.1	49.3	0.0	49.3	49.4	8.0	4.8	56.9	11.9	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.1	0.0	49.1	49.3	0.0	49.3	49.4	8.0	4.8	56.9	11.9	11.9
LOS by Move:	D	A	D	D	A	D	D	A	A	E	B	B
HCM2kAvgQ:	2	0	2	2	0	2	2	12	0	1	13	13

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.411
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	10		16		192		62		39		101		40		353		8		109		469		34	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10		16		192		62		39		101		40		353		8		109		469		34	
Added Vol:	3		0		0		0		0		4		3		9		2		0		11		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	13		16		192		62		39		105		43		362		10		109		480		34	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	16		20		235		76		48		129		53		443		12		134		588		42	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	16		20		235		76		48		129		53		443		12		134		588		42	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	16		20		235		76		48		129		53		443		12		134		588		42	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.13		0.04		0.03		0.07		0.03		0.12		0.01		0.08		0.16		0.02	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.10		0.29		0.29		0.10		0.29		0.29		0.10		0.42		0.42		0.10		0.42		0.42	
Volume/Cap:	0.09		0.04		0.45		0.43		0.09		0.24		0.30		0.30		0.02		0.75		0.39		0.06	
Delay/Veh:	39.1		24.4		28.3		42.0		24.8		26.2		40.7		18.7		16.5		58.5		19.7		16.8	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	39.1		24.4		28.3		42.0		24.8		26.2		40.7		18.7		16.5		58.5		19.7		16.8	
LOS by Move:	D		C		C		D		C		C		D		B		B		E		B		B	
HCM2kAvgQ:	1		0		6		3		1		3		2		4		0		6		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.392
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.5
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	19		54		196		59		32		51		115		514		14		84		460		61	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	19		54		196		59		32		51		115		514		14		84		460		61	
Added Vol:	7		0		0		0		0		8		9		27		7		0		26		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	26		54		196		59		32		59		124		541		21		84		486		61	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	27		55		201		61		33		61		127		555		22		86		499		63	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	27		55		201		61		33		61		127		555		22		86		499		63	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	27		55		201		61		33		61		127		555		22		86		499		63	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.03		0.07		0.15		0.01		0.05		0.14		0.03	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.16		0.11		0.40		0.36		0.07		0.12		0.53		0.36		0.03		0.47		0.35		0.09	
Delay/Veh:	41.6		26.8		29.7		43.3		26.5		26.9		42.3		19.2		16.3		43.8		21.0		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.6		26.8		29.7		43.3		26.5		26.9		42.3		19.2		16.3		43.8		21.0		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		1		5		6		0		3		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: E[40.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	33	6	1	6	4	602	20	19	610	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	33	6	1	6	4	602	20	19	610	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	26	2	33	6	1	6	4	611	20	19	621	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	30	2	38	7	1	7	5	710	23	22	721	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	30	2	38	7	1	7	5	710	23	22	721	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1493	1494	710	1516	1508	721	731	xxxx	xxxxx	733	xxxx	xxxxx												
Potent Cap.:	103	124	437	99	122	431	883	xxxx	xxxxx	881	xxxx	xxxxx												
Move Cap.:	98	121	437	87	118	431	883	xxxx	xxxxx	881	xxxx	xxxxx												
Volume/Cap:	0.31	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		171	xxxxx		xxxx		142	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		1.9	xxxxx		xxxxx		0.3	xxxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx		40.3	xxxxx		xxxxx		33.3	xxxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*		E	*		*		D	*		*	*	*		*	*	*	*						
ApproachDel:	40.3			33.3			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[20.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	33	6	1	6	4	602	20	19	610	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	33	6	1	6	4	602	20	19	610	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0												
Initial Fut:	26	0	35	0	0	13	0	621	21	19	621	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	30	0	41	0	0	15	0	721	24	22	721	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	30	0	41	0	0	15	0	721	24	22	721	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1499	1496	721	1519	1511	721	xxxx	xxxx	xxxxx	746	xxxx	xxxxx												
Potent Cap.:	102	124	431	98	121	431	xxxx	xxxx	xxxxx	872	xxxx	xxxxx												
Move Cap.:	96	121	431	87	118	431	xxxx	xxxx	xxxxx	872	xxxx	xxxxx												
Total Cap:	223	245	xxxxx	206	238	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	0.14	0.00	0.09	0.00	0.00	0.04	xxxx	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		309	xxxxx		xxxx		431	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		0.9	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Shrd ConDel:	xxxxx		20.1	xxxxx	xxxxx		13.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Shared LOS:	*		C	*	*		B	*	*	*	*	*	*	*										
ApproachDel:	20.1			13.7			xxxxxx			xxxxxx														
ApproachLOS:	C			B			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[42.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30	0	20				7	2	11				10	693	53				39	580	8			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	30	0	20				7	2	11				10	693	53				39	580	8			
Added Vol:	0	0	0				0	0	0				0	27	0				0	26	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	30	0	20				7	2	11				10	720	53				39	606	8			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	30	0	20				7	2	11				10	731	54				40	615	8			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	30	0	20				7	2	11				10	731	54				40	615	8			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1456	1453	731				1482	1499	615				623	xxxx	xxxxx				784	xxxx	xxxxx			
Potent Cap.:	109	132	425				104	123	495				968	xxxx	xxxxx				843	xxxx	xxxxx			
Move Cap.:	100	124	425				95	116	495				968	xxxx	xxxxx				843	xxxx	xxxxx			
Volume/Cap:	0.30	0.00	0.05				0.07	0.02	0.02				0.01	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	xxxxx				9.5	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		145	xxxxx			xxxx		177	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.4	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		42.8	xxxxx			xxxxx		28.0	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	42.8						28.0						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30	0	20				7	2	11				10	693	53				39	580	8			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	30	0	20				7	2	11				10	693	53				39	580	8			
Added Vol:	0	0	0				0	0	0				0	27	0				0	26	0			
PasserByVol:	0	0	0				-7	-2	9				-10	17	2				0	0	0			
Initial Fut:	30	0	20				0	0	20				0	737	55				39	606	8			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	30	0	20				0	0	20				0	748	56				40	615	8			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	30	0	20				0	0	20				0	748	56				40	615	8			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1456	1450	748				1480	1498	615				xxxx	xxxx	xxxxx				804	xxxx	xxxxx			
Potent Cap.:	109	132	416				105	124	495				xxxx	xxxx	xxxxx				829	xxxx	xxxxx			
Move Cap.:	101	126	416				96	118	495				xxxx	xxxx	xxxxx				829	xxxx	xxxxx			
Total Cap:	228	250	xxxxx				211	231	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.13	0.00	0.05				0.00	0.00	0.04				xxxx	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.6	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				*	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		278	xxxxx			xxxx		495	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.7	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx		20.8	xxxxx	xxxxx		12.6	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx									
Shared LOS:	*		C	*	*		B	*	*	*	*		*	*	*									
ApproachDel:	20.8						12.6			xxxxxx				xxxxxx										
ApproachLOS:	C						B			*				*										

Note: Queue reported is the number of cars per lane.

Opening Year (2020) With Project

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.410
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	16	4	65				12	28	0				5	278	30				202	215	11			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	16	4	65				12	28	0				5	278	30				202	215	11			
Added Vol:	0	0	7				0	0	0				0	12	0				5	10	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	16	4	72				12	28	0				5	290	30				207	225	11			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88			
PHF Volume:	18	5	82				14	32	0				6	331	34				237	257	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	18	5	82				14	32	0				6	331	34				237	257	13			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	18	5	82				14	32	0				6	331	34				237	257	13			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.81	0.19	1.00				0.31	0.69	1.00				1.00	1.00	1.00				1.00	0.95	0.05			
Final Sat.:	1375	344	1800				531	1238	1800				1700	1800	1800				1700	1716	84			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.05				0.03	0.03	0.00				0.00	0.18	0.02				0.14	0.15	0.15			
Crit Moves:			****											****					****					
Green/Cycle:	0.11	0.11	0.11				0.11	0.11	0.00				0.02	0.45	0.45				0.34	0.77	0.77			
Volume/Cap:	0.12	0.12	0.41				0.23	0.23	0.00				0.19	0.41	0.04				0.41	0.19	0.19			
Delay/Veh:	24.3	24.3	26.2				24.9	24.9	0.0				32.3	11.5	9.3				15.7	1.9	1.9			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	24.3	24.3	26.2				24.9	24.9	0.0				32.3	11.5	9.3				15.7	1.9	1.9			
LOS by Move:	C	C	C				C	C	A				C	B	A				B	A	A			
HCM2kAvgQ:	0	0	2				1	1	0				0	4	0				4	1	1			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.467
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	1 0	0	1	0	1 0	0	1	1	0	1 0	1	1	0	0	1 0
Volume Module:																
Base Vol:	21	13	45		11	6	2		4	264	26		240	279	23	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	21	13	45		11	6	2		4	264	26		240	279	23	
Added Vol:	0	0	11		0	0	0		0	32	0		11	34	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	21	13	56		11	6	2		4	296	26		251	313	23	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	26	16	69		13	7	2		5	362	32		307	383	28	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	26	16	69		13	7	2		5	362	32		307	383	28	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	26	16	69		13	7	2		5	362	32		307	383	28	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	0.63	0.37	1.00		0.66	0.34	1.00		1.00	1.00	1.00		1.00	0.93	0.07	
Final Sat.:	1073	664	1800		1122	612	1800		1700	1800	1800		1700	1677	123	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.04		0.01	0.01	0.00		0.00	0.20	0.02		0.18	0.23	0.23	
Crit Moves:			****							****			****			
Green/Cycle:	0.08	0.08	0.08		0.08	0.08	0.08		0.01	0.43	0.43		0.39	0.81	0.81	
Volume/Cap:	0.29	0.29	0.47		0.15	0.15	0.02		0.28	0.47	0.04		0.47	0.28	0.28	
Delay/Veh:	27.1	27.1	28.6		26.1	26.1	25.4		38.2	12.6	9.9		14.3	1.5	1.5	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	27.1	27.1	28.6		26.1	26.1	25.4		38.2	12.6	9.9		14.3	1.5	1.5	
LOS by Move:	C	C	C		C	C	C		D	B	A		B	A	A	
HCM2kAvgQ:	1	1	2		1	1	0		0	5	0		5	2	2	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[18.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	41	5	43	14	3	17	17	310	39	26	416	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	5	43	14	3	17	17	310	39	26	416	32
Added Vol:	0	0	0	4	0	0	0	24	0	0	18	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	5	43	18	3	17	17	334	39	26	434	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	50	6	53	22	4	21	21	410	48	32	533	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	50	6	53	22	4	21	21	410	48	32	533	43
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	784	1092	205	847	1097	267	576	xxxx	xxxxx	458	xxxx	xxxxx
Potent Cap.:	287	216	808	259	215	738	1007	xxxx	xxxxx	1113	xxxx	xxxxx
Move Cap.:	265	206	808	227	204	738	1007	xxxx	xxxxx	1113	xxxx	xxxxx
Volume/Cap:	0.19	0.03	0.07	0.10	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	22.5	xxxx	xxxxx	8.6	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	383	xxxxx	xxxx	xxxx	530	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	18.1	xxxxx	xxxxx	xxxx	12.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	18.1			17.0			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[12.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	43	14	3	17	17	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43	14	3	17	17	310	39		26	416	32	
Added Vol:	0	0	0	4	0	0	0	24	0		0	18	3	
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	84	4	0	17	17	334	39		26	475	35	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	103	5	0	21	21	410	48		32	583	43	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	103	5	0	21	21	410	48		32	583	43	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	808	1142	205	894	1147	292	626	xxxx	xxxxx		458	xxxx	xxxxx	
Potent Cap.:	276	202	808	239	201	711	965	xxxx	xxxxx		1113	xxxx	xxxxx	
Move Cap.:	258	192	808	201	191	711	965	xxxx	xxxxx		1113	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.02	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	23.4	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	808	xxxxx	xxxx	xxxx	711	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			12.7			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: E[43.1]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	90	27	82	27	39	30	31	263	37		57	461	92	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00		1.00 1.00	1.00	1.00	
Initial Bse:	90	27	82	27	39	30	31	263	37		57	461	92	
Added Vol:	0	0	0	7	0	0	0	50	0		0	52	7	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	90	27	82	34	39	30	31	313	37		57	513	99	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00		1.00 1.00	1.00	1.00	
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95	0.95	0.95 0.95	0.95	0.95		0.95 0.95	0.95	0.95	
PHF Volume:	95	29	87	36	41	32	33	331	39		60	542	105	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	95	29	87	36	41	32	33	331	39		60	542	105	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	808	1163	165	907	1097	271	646	xxxx	xxxxx		370	xxxx	xxxxx	
Potent Cap.:	276	196	856	234	215	733	949	xxxx	xxxxx		1200	xxxx	xxxxx	
Move Cap.:	208	180	856	173	197	733	949	xxxx	xxxxx		1200	xxxx	xxxxx	
Volume/Cap:	0.46	0.16	0.10	0.21	0.21	0.04	0.03	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	31.1	xxxx	xxxxx	8.9	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	293	xxxxx	xxxx	xxxx	289	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	5.1	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	43.1	xxxxx	xxxxx	xxxx	21.6	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*	*	*	C	*	*	*		*	*	*	
ApproachDel:	43.1			24.8			xxxxxx				xxxxxx			
ApproachLOS:	E			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[14.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	90	27	82	27	39	30	31	263	37		57	461	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	27	82	27	39	30	31	263	37		57	461	92	
Added Vol:	0	0	0	7	0	0	0	50	0		0	52	7	
PasserByVol:	-90	-27	90	-27	-39	0	0	0	0		0	90	0	
Initial Fut:	0	0	172	7	0	30	31	313	37		57	603	99	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	182	7	0	32	33	331	39		60	637	105	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	182	7	0	32	33	331	39		60	637	105	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	835	1258	165	988	1192	318	741	xxxx	xxxxx		370	xxxx	xxxxx	
Potent Cap.:	264	172	856	204	189	683	875	xxxx	xxxxx		1200	xxxx	xxxxx	
Move Cap.:	235	158	856	150	172	683	875	xxxx	xxxxx		1200	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.05	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	30.2	xxxx	xxxxx	9.3	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	856	xxxxx	xxxx	xxxx	683	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			14.2			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.413
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.8
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	68	113	123	115	102	92	49	279	45	153	393	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	113	123	115	102	92	49	279	45	153	393	34
Added Vol:	0	8	20	11	6	10	12	16	0	15	12	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	121	143	126	108	102	61	295	45	168	405	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	137	162	143	122	115	69	334	51	190	458	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	137	162	143	122	115	69	334	51	190	458	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	137	162	143	122	115	69	334	51	190	458	48
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3262	338
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.09	0.08	0.03	0.06	0.04	0.09	0.03	0.11	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.11	0.33	0.33	0.12	0.34	0.34	0.14	0.36	0.36
Volume/Cap:	0.42	0.11	0.27	0.80	0.10	0.19	0.35	0.28	0.08	0.82	0.39	0.39
Delay/Veh:	41.2	21.8	23.2	63.1	21.8	22.7	39.8	23.1	21.6	59.6	23.0	23.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.2	21.8	23.2	63.1	21.8	22.7	39.8	23.1	21.6	59.6	23.0	23.0
LOS by Move:	D	C	C	E	C	C	D	C	C	E	C	C
HCM2kAvgQ:	3	1	3	6	1	2	2	4	1	8	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	32.2
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	68	113	123	115	102	92	49	279	45	153	393	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	113	123	115	102	92	49	279	45	153	393	34
Added Vol:	0	8	20	11	6	10	12	16	0	15	12	8
PasserByVol:	0	5	0	10	5	0	39	-10	-2	0	0	0
Initial Fut:	68	126	143	136	113	102	100	285	43	168	405	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	143	162	154	128	115	113	323	49	190	458	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	143	162	154	128	115	113	323	49	190	458	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	143	162	154	128	115	113	323	49	190	458	48
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3262	338
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.09	0.09	0.04	0.06	0.07	0.09	0.03	0.11	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.11	0.34	0.34	0.11	0.34	0.34	0.13	0.36	0.36
Volume/Cap:	0.42	0.12	0.27	0.84	0.11	0.19	0.58	0.27	0.08	0.84	0.39	0.39
Delay/Veh:	41.1	21.8	23.2	68.4	21.7	22.5	44.2	23.1	21.5	62.8	23.1	23.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.1	21.8	23.2	68.4	21.7	22.5	44.2	23.1	21.5	62.8	23.1	23.1
LOS by Move:	D	C	C	E	C	C	D	C	C	E	C	C
HCM2kAvgQ:	3	1	3	7	1	2	4	3	1	8	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.472
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	114	170	213	127	96	109	87	319	36	118	421	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	170	213	127	96	109	87	319	36	118	421	56
Added Vol:	0	21	31	16	23	34	32	25	0	31	24	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	191	244	143	119	143	119	344	36	149	445	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	122	205	262	153	128	153	128	369	39	160	477	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	205	262	153	128	153	128	369	39	160	477	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	205	262	153	128	153	128	369	39	160	477	77
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3099	501
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.15	0.09	0.04	0.09	0.08	0.10	0.02	0.09	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.12	0.34	0.34	0.11	0.34	0.34	0.12	0.35	0.35
Volume/Cap:	0.65	0.17	0.43	0.76	0.10	0.25	0.67	0.30	0.06	0.76	0.44	0.44
Delay/Veh:	48.1	22.2	24.9	56.1	21.2	22.5	49.3	23.4	21.4	55.3	24.1	24.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.1	22.2	24.9	56.1	21.2	22.5	49.3	23.4	21.4	55.3	24.1	24.1
LOS by Move:	D	C	C	E	C	C	D	C	C	E	C	C
HCM2kAvgQ:	5	2	6	6	1	3	5	4	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	35.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	114	170	213	127	96	109	87	319	36	118	421	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	170	213	127	96	109	87	319	36	118	421	56
Added Vol:	0	21	31	16	23	34	32	25	0	31	24	16
PasserByVol:	0	27	0	19	44	0	85	-19	-2	0	0	0
Initial Fut:	114	218	244	162	163	143	204	325	34	149	445	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	122	234	262	174	175	153	219	349	36	160	477	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	234	262	174	175	153	219	349	36	160	477	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	234	262	174	175	153	219	349	36	160	477	77
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3099	501
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.15	0.10	0.05	0.09	0.13	0.10	0.02	0.09	0.15	0.15
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.16	0.36	0.36	0.11	0.31	0.31
Volume/Cap:	0.66	0.20	0.45	0.80	0.14	0.25	0.80	0.27	0.06	0.84	0.50	0.50
Delay/Veh:	51.1	24.8	27.6	60.5	23.0	24.1	55.2	22.8	21.0	69.9	28.5	28.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.1	24.8	27.6	60.5	23.0	24.1	55.2	22.8	21.0	69.9	28.5	28.5
LOS by Move:	D	C	C	E	C	C	E	C	C	E	C	C
HCM2kAvgQ:	5	3	7	8	2	3	9	4	1	8	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.383
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 9.3
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	65	301	150		18	214	68		34	46	30		86	93	25	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	65	301	150		18	214	68		34	46	30		86	93	25	
Added Vol:	0	20	0		0	15	7		9	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	65	321	150		18	229	75		43	46	30		86	93	25	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	79	391	183		22	279	91		52	56	37		105	113	30	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	79	391	183		22	279	91		52	56	37		105	113	30	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	79	391	183		22	279	91		52	56	37		105	113	30	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.50	0.50	1.00		0.44	0.44	0.12	
Final Sat.:	1700	1800	1800		1700	1800	1800		846	905	1800		740	801	215	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.22	0.10		0.01	0.16	0.05		0.06	0.06	0.02		0.14	0.14	0.14	
Crit Moves:		****												****		
Green/Cycle:	0.57	0.57	0.57		0.57	0.57	0.57		0.37	0.37	0.37		0.37	0.37	0.37	
Volume/Cap:	0.08	0.38	0.18		0.02	0.27	0.09		0.17	0.17	0.05		0.38	0.38	0.38	
Delay/Veh:	6.4	8.0	6.8		6.1	7.3	6.4		13.9	13.9	13.2		15.4	15.4	15.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.4	8.0	6.8		6.1	7.3	6.4		13.9	13.9	13.2		15.4	15.4	15.4	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	5	2		0	3	1		2	2	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.421
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	56	444	235	19	110	100	29	38	19	53	52	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	444	235	19	110	100	29	38	19	53	52	38
Added Vol:	0	39	0	0	40	13	13	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	483	235	19	150	113	42	38	19	53	52	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	63	546	266	21	170	128	47	43	21	60	59	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	546	266	21	170	128	47	43	21	60	59	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	546	266	21	170	128	47	43	21	60	59	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.54	0.46	1.00	0.38	0.36	0.26
Final Sat.:	1700	1800	1800	1700	1800	1800	917	829	1800	653	641	468
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.15	0.01	0.09	0.07	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.62	0.62	0.62	0.62	0.62	0.62	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.06	0.49	0.24	0.02	0.15	0.12	0.16	0.16	0.04	0.28	0.28	0.28
Delay/Veh:	5.0	7.2	5.8	4.9	5.4	5.2	15.8	15.8	15.1	16.7	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.0	7.2	5.8	4.9	5.4	5.2	15.8	15.8	15.1	16.7	16.7	16.7
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	1	1	0	3	3	3

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[20.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	3	0	6	2	0	0	0	474	2	10	676	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	6	2	0	0	0	474	2	10	676	1
Added Vol:	3	0	3	4	0	3	4	46	4	4	43	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	0	9	6	0	3	4	520	6	14	719	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	7	0	11	7	0	4	5	636	7	17	880	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	0	11	7	0	4	5	636	7	17	880	7
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1565	1567	636	1569	1567	880	887	xxxx	xxxxx	643	xxxx	xxxxx
Potent Cap.:	91	112	481	91	112	349	772	xxxx	xxxxx	951	xxxx	xxxxx
Move Cap.:	89	109	481	87	109	349	772	xxxx	xxxxx	951	xxxx	xxxxx
Total Cap:	209	228	xxxxx	207	228	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	0.00	0.02	0.04	0.00	0.01	0.01	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	8.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	316	xxxxx	xxxx	240	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	17.1	xxxxx	xxxxx	20.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:		17.1			20.7		xxxxxx			xxxxxx		
ApproachLOS:		C			C		*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[22.0]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled					Uncontrolled				
Rights:	Include				Include				Include					Include				
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	1	0	1	1	0	1	0	1
Volume Module:																		
Base Vol:	10	0	8	7	0	2	3	725	3	14	554	4						
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	10	0	8	7	0	2	3	725	3	14	554	4						
Added Vol:	7	0	7	8	0	6	6	93	7	7	91	8						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	17	0	15	15	0	8	9	818	10	21	645	12						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94						
PHF Volume:	18	0	16	16	0	9	10	873	11	22	688	13						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	18	0	16	16	0	9	10	873	11	22	688	13						
Critical Gap Module:																		
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	1636	1638	873	1639	1636	688	701	xxxx	xxxxx	884	xxxx	xxxxx						
Potent Cap.:	82	101	352	81	102	449	905	xxxx	xxxxx	774	xxxx	xxxxx						
Move Cap.:	78	98	352	75	98	449	905	xxxx	xxxxx	774	xxxx	xxxxx						
Total Cap:	198	217	xxxxx	188	213	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	0.09	0.00	0.05	0.09	0.00	0.02	0.01	xxxx	xxxx	0.03	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	9.8	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*						
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT						
Shared Cap.:	xxxx	249	xxxxx	xxxx	236	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	21.7	xxxxx	xxxxx	22.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*						
ApproachDel:	21.7			22.0			xxxxxx			xxxxxx								
ApproachLOS:	C			C			*			*								

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[15.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	590	0
Added Vol:	7	0	3	0	0	0	0	49	4	4	46	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	3	0	0	0	0	479	4	4	636	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	8	0	3	0	0	0	0	545	5	5	723	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	0	3	0	0	0	0	545	5	5	723	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1277	1277	545	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	549	xxxx	xxxxx
Potent Cap.:	186	168	542	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1031	xxxx	xxxxx
Move Cap.:	185	167	542	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1031	xxxx	xxxxx
Total Cap:	323	290	xxxxx	274	288	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	368	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[19.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 1	0	1	1 0 1	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	660	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	660	0	0	590	0
Added Vol:	13	0	7	0	0	0	0	101	7	7	92	0
PasserByVol:	19	0	3	0	0	0	0	0	18	2	0	0
Initial Fut:	32	0	10	0	0	0	0	761	25	9	682	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	34	0	11	0	0	0	0	805	26	10	721	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	34	0	11	0	0	0	0	805	26	10	721	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1545	1545	805	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	831	xxxx	xxxxx
Potent Cap.:	127	116	386	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	810	xxxx	xxxxx
Move Cap.:	126	114	386	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	810	xxxx	xxxxx
Total Cap:	266	239	xxxxx	212	232	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.13	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	287	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	19.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	590	0
Added Vol:	0	0	10	0	0	0	0	23	30	0	50	0
PasserByVol:	0	0	17	0	0	0	0	0	17	0	0	0
Initial Fut:	0	0	27	0	0	0	0	453	47	0	640	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	31	0	0	0	0	515	53	0	728	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	31	0	0	0	0	515	53	0	728	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	515	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	564	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	564	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	332	297	xxxxx	267	287	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[14.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	660	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	660	0	0	590	0
Added Vol:	0	0	20	0	0	0	0	61	47	0	99	0
PasserByVol:	0	0	20	0	0	0	0	0	20	0	0	0
Initial Fut:	0	0	40	0	0	0	0	721	67	0	689	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	42	0	0	0	0	763	71	0	729	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	42	0	0	0	0	763	71	0	729	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	763	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	408	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	408	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	278	250	xxxxx	207	237	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	14.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: E[39.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	7		1		22		17		4		29		19	392		26			20	564			14	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00	1.00		1.00			1.00	1.00			1.00	
Initial Bse:	7		1		22		17		4		29		19	392		26			20	564			14	
Added Vol:	23		3		7		0		4		0		0	30		2			21	27			0	
PasserByVol:	0		2		0		0		2		0		0	0		15			15	0			0	
Initial Fut:	30		6		29		17		10		29		19	422		43			56	591			14	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00	1.00		1.00			1.00	1.00			1.00	
PHF Adj:	0.89		0.89		0.89		0.89		0.89		0.89		0.89	0.89		0.89			0.89	0.89			0.89	
PHF Volume:	34		7		33		19		11		33		21	476		48			63	666			16	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	34		7		33		19		11		33		21	476		48			63	666			16	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx		xxxxx			4.1	xxxx			xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx		xxxxx			2.2	xxxx			xxxxx	
Capacity Module:																								
Cnflict Vol:	1341		1326		476		1363		1367		674		682	xxxx		xxxxx			524	xxxx			xxxxx	
Potent Cap.:	131		157		593		126		148		458		920	xxxx		xxxxx			1053	xxxx			xxxxx	
Move Cap.:	107		144		593		108		136		458		920	xxxx		xxxxx			1053	xxxx			xxxxx	
Volume/Cap:	0.32		0.05		0.06		0.18		0.08		0.07		0.02	xxxx		xxxx			0.06	xxxx			xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1	xxxx		xxxxx			0.2	xxxx			xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.0	xxxx		xxxxx			8.6	xxxx			xxxxx	
LOS by Move:	*		*		*		*		*		*		A	*		*			A	*			*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		175		xxxxx		xxxx		190		xxxxx		xxxx	xxxx		xxxxx			xxxx	xxxx			xxxxx	
SharedQueue:	xxxxx		1.9		xxxxx		xxxxx		1.4		xxxxx		xxxxx	xxxx		xxxxx			xxxxx	xxxx			xxxxx	
Shrd ConDel:	xxxxx		39.6		xxxxx		xxxxx		33.0		xxxxx		xxxxx	xxxx		xxxxx			xxxxx	xxxx			xxxxx	
Shared LOS:	*		E		*		*		D		*		*	*		*			*	*			*	
ApproachDel:			39.6						33.0					xxxxxx						xxxxxx				
ApproachLOS:			E						D					*						*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	14.9
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	7	1	22	17	4	29	19	392	26	20	564	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	1	22	17	4	29	19	392	26	20	564	14
Added Vol:	23	3	7	0	4	0	0	30	2	21	27	0
PasserByVol:	0	2	0	0	2	0	0	0	15	15	0	0
Initial Fut:	30	6	29	17	10	29	19	422	43	56	591	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	34	7	33	19	11	33	21	476	48	63	666	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	7	33	19	11	33	21	476	48	63	666	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	7	33	19	11	33	21	476	48	63	666	16
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.17	0.83	1.00	0.26	0.74	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	309	1491	1700	462	1338	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.26	0.03	0.04	0.37	0.01
Crit Moves:					****			****			****	
Green/Cycle:	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.56	0.56	0.18	0.63	0.63
Volume/Cap:	0.10	0.11	0.11	0.06	0.12	0.12	0.12	0.47	0.05	0.21	0.59	0.01
Delay/Veh:	31.1	31.2	31.2	30.8	31.3	31.3	38.8	12.8	9.4	33.9	11.0	6.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.1	31.2	31.2	30.8	31.3	31.3	38.8	12.8	9.4	33.9	11.0	6.5
LOS by Move:	C	C	C	C	C	C	D	B	A	C	B	A
HCM2kAvgQ:	1	1	1	0	1	1	1	8	1	2	12	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 23.6 Worst Case Level Of Service: F[304.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	20	0	20				25	0	25				39	605	16				24	555	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	20	0	20				25	0	25				39	605	16				24	555	21			
Added Vol:	44	7	13				0	7	0				0	76	5				33	54	0			
PasserByVol:	0	2	0				0	2	2				3	0	34				33	0	0			
Initial Fut:	64	9	33				25	9	27				42	681	55				90	609	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	67	9	35				26	9	28				44	717	58				95	641	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	67	9	35				26	9	28				44	717	58				95	641	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1665	1658	717				1698	1704	652				663	xxxx	xxxxx				775	xxxx	xxxxx			
Potent Cap.:	78	99	433				74	92	471				935	xxxx	xxxxx				850	xxxx	xxxxx			
Move Cap.:	59	84	433				55	78	471				935	xxxx	xxxxx				850	xxxx	xxxxx			
Volume/Cap:	1.15	0.11	0.08				0.48	0.12	0.06				0.05	xxxx	xxxx				0.11	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.4	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.8	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		83	xxxxx			xxxx		97	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		8.5	xxxxx			xxxxx		3.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		304	xxxxx			xxxxx		95.5	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		F	*			*	*	*				*	*	*			
ApproachDel:	304.2						95.5						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	17.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	20	0	20	25	0	25	39	605	16	24	555	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	0	20	25	0	25	39	605	16	24	555	21
Added Vol:	44	7	13	0	7	0	0	76	5	33	54	0
PasserByVol:	0	2	0	0	2	2	3	0	34	33	0	0
Initial Fut:	64	9	33	25	9	27	42	681	55	90	609	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	67	9	35	26	9	28	44	717	58	95	641	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	9	35	26	9	28	44	717	58	95	641	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	9	35	26	9	28	44	717	58	95	641	22
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.21	0.79	1.00	0.25	0.75	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	386	1414	1700	450	1350	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.02	0.02	0.02	0.03	0.40	0.03	0.06	0.36	0.01
Crit Moves:	****							****		****		
Green/Cycle:	0.19	0.19	0.19	0.19	0.19	0.19	0.16	0.65	0.65	0.10	0.59	0.59
Volume/Cap:	0.21	0.13	0.13	0.08	0.11	0.11	0.16	0.61	0.05	0.56	0.61	0.02
Delay/Veh:	34.5	33.8	33.8	33.4	33.7	33.7	36.1	11.1	6.3	47.0	14.4	8.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	33.8	33.8	33.4	33.7	33.7	36.1	11.1	6.3	47.0	14.4	8.7
LOS by Move:	C	C	C	C	C	C	D	B	A	D	B	A
HCM2kAvgQ:	2	1	1	1	1	1	1	13	1	4	13	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[9.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	30	0	0	50	0	0	0	0	0	0	0												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	0	30	0	0	50	0	0	0	0	0	0	0												
Added Vol:	13	3	0	0	2	25	30	0	10	0	0	0												
PasserByVol:	6	0	0	0	0	17	17	0	6	0	0	0												
Initial Fut:	19	33	0	0	52	42	47	0	16	0	0	0												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81												
PHF Volume:	23	41	0	0	64	52	58	0	20	0	0	0												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	23	41	0	0	64	52	58	0	20	0	0	0												
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx												
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	116	xxxx	xxxxx	xxxx	xxxx	xxxxx	178	178	90	xxxx	xxxx	xxxxx												
Potent Cap.:	1485	xxxx	xxxxx	xxxx	xxxx	xxxxx	816	719	973	xxxx	xxxx	xxxxx												
Move Cap.:	1485	xxxx	xxxxx	xxxx	xxxx	xxxxx	806	708	973	xxxx	xxxx	xxxxx												
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.02	xxxx	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	843	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*												
ApproachDel:	xxxxxx			xxxxxx			9.7			xxxxxx														
ApproachLOS:	*			*			A			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: B[10.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 40	0		0 40	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 40	0		0 40	0		0 0	0		0 0	0	
Added Vol:	20 5	0		0 5	40		59 0	20		0 0	0	
PasserByVol:	13 0	0		0 0	37		39 0	14		0 0	0	
Initial Fut:	33 45	0		0 45	77		98 0	34		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85	
PHF Volume:	39 53	0		0 53	91		115 0	40		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	39 53	0		0 53	91		115 0	40		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		6.4 6.5	6.2		xxxxx xxxx	xxxxx	
FollowUpTim:	2.2 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		3.5 4.0	3.3		xxxxx xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	144 xxxx xxxxx	xxxx		xxxx xxxxx	xxxxx		229 229	98		xxxx xxxx	xxxxx	
Potent Cap.:	1451 xxxx xxxxx	xxxx		xxxx xxxxx	xxxxx		764 674	963		xxxx xxxx	xxxxx	
Move Cap.:	1451 xxxx xxxxx	xxxx		xxxx xxxxx	xxxxx		748 656	963		xxxx xxxx	xxxxx	
Volume/Cap:	0.03 xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.15 0.00	0.04		xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx	xxxx		xxxx xxxxx	xxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
Control Del:	7.5 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	
LOS by Move:	A *	*		* *	*		* *	*		* *	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx 794	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.1 xxxx xxxxx	xxxxx		xxxx xxxx xxxxx	xxxxx		0.7	xxxxx		xxxxx xxxx	xxxxx	
Shrd ConDel:	7.5 xxxx xxxxx	xxxxx		xxxx xxxx xxxxx	xxxxx		10.6	xxxxx		xxxxx xxxx	xxxxx	
Shared LOS:	A *	*		* *	*		* B	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			10.6			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.414
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 27.5
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	10		16		192		62		39		101		40		353		8		109		469		34	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10		16		192		62		39		101		40		353		8		109		469		34	
Added Vol:	7		0		0		0		0		17		13		18		6		0		24		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	17		16		192		62		39		118		53		371		14		109		493		34	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	21		20		235		76		48		145		65		454		17		134		604		42	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	21		20		235		76		48		145		65		454		17		134		604		42	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	21		20		235		76		48		145		65		454		17		134		604		42	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.13		0.04		0.03		0.08		0.04		0.13		0.01		0.08		0.17		0.02	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.11		0.31		0.31		0.11		0.31		0.31		0.10		0.40		0.40		0.10		0.40		0.40	
Volume/Cap:	0.11		0.03		0.42		0.42		0.09		0.26		0.38		0.31		0.02		0.78		0.42		0.06	
Delay/Veh:	40.3		23.9		27.7		43.3		24.6		26.2		43.5		20.7		18.1		64.7		21.8		18.4	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	40.3		23.9		27.7		43.3		24.6		26.2		43.5		20.7		18.1		64.7		21.8		18.4	
LOS by Move:	D		C		C		D		C		C		D		C		B		E		C		B	
HCM2kAvgQ:	1		0		6		3		1		3		2		5		0		6		7		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.412
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	19	54	196	59	32	51	115	514	14	84	460	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	54	196	59	32	51	115	514	14	84	460	61
Added Vol:	14	0	0	0	0	28	29	47	14	0	46	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	54	196	59	32	79	144	561	28	84	506	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	34	55	201	61	33	81	148	576	29	86	520	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	55	201	61	33	81	148	576	29	86	520	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	55	201	61	33	81	148	576	29	86	520	63
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.05	0.09	0.16	0.02	0.05	0.14	0.03
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.20	0.11	0.40	0.36	0.07	0.16	0.62	0.37	0.04	0.47	0.36	0.09
Delay/Veh:	41.9	26.8	29.7	43.3	26.5	27.3	45.5	19.4	16.4	43.8	21.2	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.9	26.8	29.7	43.3	26.5	27.3	45.5	19.4	16.4	43.8	21.2	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	2	6	6	0	3	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: E[46.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	33	6	1	6	4	602	20	19	610	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	33	6	1	6	4	602	20	19	610	8												
Added Vol:	4	0	0	0	0	0	0	15	3	0	20	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	30	2	33	6	1	6	4	617	23	19	630	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	35	2	38	7	1	7	5	717	27	22	732	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	35	2	38	7	1	7	5	717	27	22	732	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1510	1511	717	1535	1528	732	741	xxxx	xxxxx	743	xxxx	xxxxx												
Potent Cap.:	100	121	433	96	118	425	875	xxxx	xxxxx	873	xxxx	xxxxx												
Move Cap.:	95	118	433	84	115	425	875	xxxx	xxxxx	873	xxxx	xxxxx												
Volume/Cap:	0.37	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	159	xxxxx	xxxx	138	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	2.2	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	46.5	xxxxx	xxxxx	34.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	E	*	*	D	*	*	*	*	*	*	*												
ApproachDel:	46.5			34.3			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[21.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	33	6	1	6	4	602	20	19	610	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	33	6	1	6	4	602	20	19	610	8												
Added Vol:	4	0	0	0	0	0	0	15	3	0	20	0												
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0												
Initial Fut:	30	0	35	0	0	13	0	627	24	19	630	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	35	0	41	0	0	15	0	728	28	22	732	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	35	0	41	0	0	15	0	728	28	22	732	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1516	1513	728	1538	1532	732	xxxx	xxxx	xxxxx	756	xxxx	xxxxx												
Potent Cap.:	99	121	427	95	118	425	xxxx	xxxx	xxxxx	864	xxxx	xxxxx												
Move Cap.:	93	118	427	85	115	425	xxxx	xxxx	xxxxx	864	xxxx	xxxxx												
Total Cap:	220	242	xxxxx	203	234	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	0.16	0.00	0.10	0.00	0.00	0.04	xxxx	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		298	xxxxx		xxxx		425	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		1.0	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Shrd ConDel:	xxxxx		21.2	xxxxx	xxxxx		13.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Shared LOS:	*		C	*	*		B	*	*	*	*	*	*	*										
ApproachDel:	21.2			13.8			xxxxxx			xxxxxx														
ApproachLOS:	C			B			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: F[52.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30	0	20				7	2	11				10	693	53				39	580	8			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	30	0	20				7	2	11				10	693	53				39	580	8			
Added Vol:	7	0	0				0	0	0				0	40	7				0	39	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	37	0	20				7	2	11				10	733	60				39	619	8			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	38	0	20				7	2	11				10	744	61				40	628	8			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	38	0	20				7	2	11				10	744	61				40	628	8			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1482	1480	744				1512	1532	628				636	xxxx	xxxxx				805	xxxx	xxxxx			
Potent Cap.:	104	127	418				100	118	486				957	xxxx	xxxxx				828	xxxx	xxxxx			
Move Cap.:	96	119	418				90	111	486				957	xxxx	xxxxx				828	xxxx	xxxxx			
Volume/Cap:	0.39	0.00	0.05				0.08	0.02	0.02				0.01	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	xxxxx				9.6	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		132	xxxxx			xxxx		170	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.9	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		52.2	xxxxx			xxxxx		29.1	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	52.2						29.1						xxxxxx						xxxxxx					
ApproachLOS:	F						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[22.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		693		53		39		580		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		693		53		39		580		8	
Added Vol:	7		0		0		0		0		0		0		40		7		0		39		0	
PasserByVol:	0		0		0		-7		-2		9		-10		17		2		0		0		0	
Initial Fut:	37		0		20		0		0		20		0		750		62		39		619		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	38		0		20		0		0		20		0		761		63		40		628		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	38		0		20		0		0		20		0		761		63		40		628		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1483		1477		761		1510		1531		628		xxxx		xxxx		xxxxx		824		xxxx		xxxxx	
Potent Cap.:	104		127		409		100		118		486		xxxx		xxxx		xxxxx		815		xxxx		xxxxx	
Move Cap.:	96		121		409		91		112		486		xxxx		xxxx		xxxxx		815		xxxx		xxxxx	
Total Cap:	223		245		xxxxx		205		225		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.17		0.00		0.05		0.00		0.00		0.04		xxxx		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.2		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.6		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		265		xxxxx		xxxx		486		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.8		xxxxx		xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		22.3		xxxxx		xxxxx		12.7		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		B		*		*		*		*		*		*		*	
ApproachDel:	22.3						12.7						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

Opening Year (2021) Without Project

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.410
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	16	4	66	12	29	0	5	281	31	205	214	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	4	66	12	29	0	5	281	31	205	214	11
Added Vol:	0	0	3	0	0	0	0	12	0	2	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	4	69	12	29	0	5	293	31	207	224	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	5	79	14	33	0	6	335	35	237	256	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	5	79	14	33	0	6	335	35	237	256	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	5	79	14	33	0	6	335	35	237	256	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.81	0.19	1.00	0.30	0.70	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1375	344	1800	518	1252	1800	1700	1800	1800	1700	1716	84
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.04	0.03	0.03	0.00	0.00	0.19	0.02	0.14	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.11	0.11	0.11	0.11	0.11	0.00	0.02	0.45	0.45	0.34	0.78	0.78
Volume/Cap:	0.12	0.12	0.41	0.25	0.25	0.00	0.19	0.41	0.04	0.41	0.19	0.19
Delay/Veh:	24.6	24.6	26.5	25.3	25.3	0.0	32.2	11.3	9.2	15.7	1.8	1.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	24.6	26.5	25.3	25.3	0.0	32.2	11.3	9.2	15.7	1.8	1.8
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	10.8
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	21	13	45	11	6	2	4	264	26	240	279	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	45	11	6	2	4	264	26	240	279	23
Added Vol:	0	0	5	0	0	0	0	32	0	5	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	50	11	6	2	4	296	26	245	313	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	26	16	61	13	7	2	5	362	32	300	383	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	16	61	13	7	2	5	362	32	300	383	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	16	61	13	7	2	5	362	32	300	383	28
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.63	0.37	1.00	0.66	0.34	1.00	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	1073	664	1800	1122	612	1800	1700	1800	1800	1700	1677	123
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.03	0.01	0.01	0.00	0.00	0.20	0.02	0.18	0.23	0.23
Crit Moves:			****					****		****		
Green/Cycle:	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.44	0.44	0.39	0.82	0.82
Volume/Cap:	0.32	0.32	0.46	0.16	0.16	0.02	0.28	0.46	0.04	0.46	0.28	0.28
Delay/Veh:	27.8	27.8	29.1	26.6	26.6	25.8	38.1	12.2	9.6	14.3	1.4	1.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	27.8	29.1	26.6	26.6	25.8	38.1	12.2	9.6	14.3	1.4	1.4
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.7]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	44	14	3	17	17	310	39	26	416	32								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	44	14	3	17	17	310	39	26	416	32								
Added Vol:	0	0	0	0	0	0	0	15	0	0	12	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	41	5	44	14	3	17	17	325	39	26	428	32								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	50	6	54	17	4	21	21	399	48	32	526	39								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	50	6	54	17	4	21	21	399	48	32	526	39								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	769	1070	200	834	1078	263	565	xxxx	xxxxx	447	xxxx	xxxxx								
Potent Cap.:	294	223	814	264	220	742	1017	xxxx	xxxxx	1124	xxxx	xxxxx								
Move Cap.:	272	212	814	232	210	742	1017	xxxx	xxxxx	1124	xxxx	xxxxx								
Volume/Cap:	0.19	0.03	0.07	0.07	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	21.7	xxxx	xxxxx	8.6	xxxx	xxxxx	8.3	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	394	xxxxx	xxxx	xxxx	537	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	17.7	xxxxx	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*								
ApproachDel:	17.7			16.0			xxxxxx			xxxxxx										
ApproachLOS:	C			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	43	14	3	17	17	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	43	14	3	17	17	310	39		26	416	32	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	84	0	0	17	17	325	39		26	469	32	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	103	0	0	21	21	399	48		32	576	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	103	0	0	21	21	399	48		32	576	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	793	1120	200	881	1129	288	615	xxxx	xxxxx		447	xxxx	xxxxx	
Potent Cap.:	283	208	814	244	206	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Move Cap.:	264	198	814	205	196	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.00	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	814	xxxxx	xxxx	xxxx	715	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			10.2			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.4 Worst Case Level Of Service: E[40.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	91	27	82	27	39	30	31	263	36	57	471	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	27	82	27	39	30	31	263	36	57	471	92
Added Vol:	0	0	0	0	0	0	0	36	0	0	39	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	27	82	27	39	30	31	299	36	57	510	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	96	29	87	29	41	32	33	316	38	60	539	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	96	29	87	29	41	32	33	316	38	60	539	97
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	792	1137	158	897	1078	269	636	xxxx	xxxxx	354	xxxx	xxxxx
Potent Cap.:	283	203	866	238	220	735	957	xxxx	xxxxx	1216	xxxx	xxxxx
Move Cap.:	215	187	866	178	202	735	957	xxxx	xxxxx	1216	xxxx	xxxxx
Volume/Cap:	0.45	0.15	0.10	0.16	0.20	0.04	0.03	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	29.1	xxxx	xxxxx	8.9	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	302	xxxxx	xxxx	xxxx	295	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	4.9	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	40.6	xxxxx	xxxxx	xxxx	21.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	C	*	*	*	*	*	*
ApproachDel:	40.6			23.4			xxxxxx			xxxxxx		
ApproachLOS:	E			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		57	471	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82	27	39	30	31	263	36		57	471	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0		0	91	0	
Initial Fut:	0	0	173	0	0	30	31	299	36		57	601	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	183	0	0	32	33	316	38		60	635	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	183	0	0	32	33	316	38		60	635	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	819	1233	158	978	1174	317	732	xxxx	xxxxx		354	xxxx	xxxxx	
Potent Cap.:	271	178	866	208	193	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Move Cap.:	242	163	866	153	177	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	866	xxxxx	xxxx	xxxx	684	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			10.5			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.388
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	67	116	126	118	104	92	48	276	46	160	395	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	116	126	118	104	92	48	276	46	160	395	35
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	124	129	120	110	102	60	279	46	162	397	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	140	146	136	124	115	68	316	52	183	449	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	140	146	136	124	115	68	316	52	183	449	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	140	146	136	124	115	68	316	52	183	449	41
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3301	299
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.08	0.08	0.03	0.06	0.04	0.09	0.03	0.11	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.12	0.32	0.32	0.16	0.36	0.36
Volume/Cap:	0.42	0.12	0.25	0.67	0.10	0.19	0.34	0.27	0.09	0.67	0.37	0.37
Delay/Veh:	43.3	24.1	25.4	50.6	23.1	24.0	41.6	25.5	23.9	45.8	23.6	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.3	24.1	25.4	50.6	23.1	24.0	41.6	25.5	23.9	45.8	23.6	23.6
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	3	6	1	3	2	4	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.302
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	21.3
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0
Volume Module:																
Base Vol:	67	116	126		118	104	92		48	276	46		160	395	35	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	67	116	126		118	104	92		48	276	46		160	395	35	
Added Vol:	0	8	3		2	6	10		12	3	0		2	2	1	
PasserByVol:	0	5	0		10	5	0		39	-10	-2		0	0	0	
Initial Fut:	67	129	129		130	115	102		99	269	44		162	397	36	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	76	146	146		147	130	115		112	304	50		183	449	41	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	76	146	146		147	130	115		112	304	50		183	449	41	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	76	146	146		147	130	115		112	304	50		183	449	41	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.83	0.17	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3301	299	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.04	0.08		0.09	0.04	0.06		0.07	0.08	0.03		0.11	0.14	0.14	
Crit Moves:			****							****			****			
Green/Cycle:	0.38	0.38	0.38		0.38	0.38	0.38		0.13	0.38	0.38		0.15	0.40	0.40	
Volume/Cap:	0.12	0.11	0.22		0.23	0.10	0.17		0.51	0.22	0.07		0.71	0.34	0.34	
Delay/Veh:	17.4	17.3	18.1		18.3	17.2	17.8		36.5	18.1	17.0		42.7	17.8	17.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.4	17.3	18.1		18.3	17.2	17.8		36.5	18.1	17.0		42.7	17.8	17.8	
LOS by Move:	B	B	B		B	B	B		D	B	B		D	B	B	
HCM2kAvgQ:	1	1	3		3	1	2		4	3	1		6	5	5	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.2
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	117	170	213	127	96	107	87	321	37	117	425	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	170	213	127	96	107	87	321	37	117	425	57
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	117	191	218	130	119	141	119	326	37	122	430	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	126	205	234	139	128	151	128	350	40	131	461	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	205	234	139	128	151	128	350	40	131	461	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	205	234	139	128	151	128	350	40	131	461	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3159	441
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.08	0.04	0.08	0.08	0.10	0.02	0.08	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.66	0.16	0.37	0.75	0.10	0.24	0.67	0.28	0.06	0.71	0.42	0.42
Delay/Veh:	47.7	20.8	22.9	55.9	20.5	21.7	48.5	21.8	20.0	51.5	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.7	20.8	22.9	55.9	20.5	21.7	48.5	21.8	20.0	51.5	23.3	23.3
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	5	6	1	3	5	4	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.445
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	23.0
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	117	170	213	127	96	107	87	321	37	117	425	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	170	213	127	96	107	87	321	37	117	425	57
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	27	0	19	44	0	86	-19	-2	0	0	0
Initial Fut:	117	218	218	149	163	141	205	307	35	122	430	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	126	234	234	160	175	151	220	329	38	131	461	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	234	234	160	175	151	220	329	38	131	461	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	234	234	160	175	151	220	329	38	131	461	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3159	441
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.13	0.09	0.05	0.08	0.13	0.09	0.02	0.08	0.15	0.15
Crit Moves:			****				****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.42	0.42	0.13	0.34	0.34
Volume/Cap:	0.21	0.18	0.37	0.26	0.14	0.24	0.61	0.22	0.05	0.58	0.42	0.42
Delay/Veh:	20.4	20.1	21.8	20.9	19.7	20.6	35.3	16.5	15.3	40.5	22.9	22.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	20.1	21.8	20.9	19.7	20.6	35.3	16.5	15.3	40.5	22.9	22.9
LOS by Move:	C	C	C	C	B	C	D	B	B	D	C	C
HCM2kAvgQ:	3	2	5	3	2	3	7	3	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.382
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 0 1!	0	0
Volume Module:												
Base Vol:	67	300	152	20	220	72	34	48	29	90	94	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	300	152	20	220	72	34	48	29	90	94	26
Added Vol:	0	11	0	0	9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	311	152	20	229	72	34	48	29	90	94	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	82	379	185	24	279	88	41	59	35	110	115	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	379	185	24	279	88	41	59	35	110	115	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	379	185	24	279	88	41	59	35	110	115	32
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.43	0.57	1.00	0.44	0.44	0.12
Final Sat.:	1700	1800	1800	1700	1800	1800	729	1029	1800	752	786	217
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.10	0.01	0.16	0.05	0.06	0.06	0.02	0.15	0.15	0.15
Crit Moves:		****									****	
Green/Cycle:	0.55	0.55	0.55	0.55	0.55	0.55	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.09	0.38	0.19	0.03	0.28	0.09	0.15	0.15	0.05	0.38	0.38	0.38
Delay/Veh:	6.4	7.9	6.8	6.1	7.3	6.4	12.3	12.3	11.7	13.8	13.8	13.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.4	7.9	6.8	6.1	7.3	6.4	12.3	12.3	11.7	13.8	13.8	13.8
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	4	2	0	3	1	1	1	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.413
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 0 1!	0	0
Volume Module:												
Base Vol:	58	444	234	17	106	99	31	39	21	54	52	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	444	234	17	106	99	31	39	21	54	52	35
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	470	234	17	133	99	31	39	21	54	52	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	531	265	19	150	112	35	44	24	61	59	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	531	265	19	150	112	35	44	24	61	59	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	531	265	19	150	112	35	44	24	61	59	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.46	0.54	1.00	0.40	0.36	0.24
Final Sat.:	1700	1800	1800	1700	1800	1800	777	977	1800	674	649	437
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.15	0.01	0.08	0.06	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.07	0.51	0.25	0.02	0.14	0.11	0.13	0.13	0.04	0.26	0.26	0.26
Delay/Veh:	5.4	7.8	6.2	5.3	5.7	5.6	13.4	13.4	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.8	6.2	5.3	5.7	5.6	13.4	13.4	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.6]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	676	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	676	1	
Added Vol:	0	0	0	4	0	3	4	12	0		0	17	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	486	2		10	693	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	594	2		12	848	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	594	2		12	848	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1482	1484	594	1481	1479	848	855	xxxx	xxxxx		597	xxxx	xxxxx	
Potent Cap.:	104	126	508	105	127	364	793	xxxx	xxxxx		990	xxxx	xxxxx	
Move Cap.:	102	124	508	102	125	364	793	xxxx	xxxxx		990	xxxx	xxxxx	
Total Cap:	225	243	xxxxx	225	244	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	358	xxxxx	xxxx	258	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.4	xxxxx	xxxxx	19.6	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.4			19.6			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 0 1				1 0 1 0 1			
Volume Module:														
Base Vol:	10	0	8	7	0	2	3	725	3		14	554	4	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	10	0	8	7	0	2	3	725	3		14	554	4	
Added Vol:	0	0	0	8	0	6	6	40	0		0	38	8	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	10	0	8	15	0	8	9	765	3		14	592	12	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	11	0	9	16	0	9	10	817	3		15	632	13	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	11	0	9	16	0	9	10	817	3		15	632	13	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1508	1510	817	1503	1501	632	645	xxxx	xxxxx		820	xxxx	xxxxx	
Potent Cap.:	100	121	380	101	123	484	950	xxxx	xxxxx		818	xxxx	xxxxx	
Move Cap.:	96	118	380	97	120	484	950	xxxx	xxxxx		818	xxxx	xxxxx	
Total Cap:	221	240	xxxxx	218	238	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.05	0.00	0.02	0.07	0.00	0.02	0.01	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		9.5	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	272	xxxxx	xxxx	269	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	19.3	xxxxx	xxxxx	19.7	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	19.3			19.7			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: C[24.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		28		16		4		30		20	394		26			19	570			18	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	
Initial Bse:	10		2		28		16		4		30		20	394		26			19	570			18	
Added Vol:	3		0		0		0		0		0		0	14		2			0	19			0	
PasserByVol:	0		0		0		0		0		0		0	0		0			0	0			0	
Initial Fut:	13		2		28		16		4		30		20	408		28			19	589			18	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	
PHF Volume:	15		2		32		18		5		34		23	460		32			21	664			20	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	15		2		32		18		5		34		23	460		32			21	664			20	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx		xxxxx			4.1	xxxx			xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx		xxxxx			2.2	xxxx			xxxxx	
Capacity Module:																								
Cnflict Vol:	1241		1232		460		1254		1253		674		684	xxxx		xxxxx			491	xxxx			xxxxx	
Potent Cap.:	153		179		606		150		174		458		919	xxxx		xxxxx			1082	xxxx			xxxxx	
Move Cap.:	134		171		606		136		166		458		919	xxxx		xxxxx			1082	xxxx			xxxxx	
Volume/Cap:	0.11	0.01		0.05		0.13	0.03		0.07		0.02	xxxx		xxxx			0.02	xxxx		xxxx				
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			0.1	xxxx		xxxxx			0.1	xxxx			xxxxx		
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			9.0	xxxx		xxxxx			8.4	xxxx			xxxxx		
LOS by Move:	*	*		*		*	*		*			A	*		*			A	*			*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		278	xxxxx		xxxx		241	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		0.6	xxxxx		xxxxx		0.9	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		20.7	xxxxx		xxxxx		24.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*		C	*		*		C	*		*	*	*		*	*	*							
ApproachDel:	20.7					24.4					xxxxxx					xxxxxx								
ApproachLOS:	C					C					*					*								

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.422
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	13.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	7	1	22	17	4	29	19	392	26	20	564	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	1	22	17	4	29	19	392	26	20	564	14
Added Vol:	3	0	0	0	0	0	0	14	2	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	1	22	17	4	29	19	406	28	20	583	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	11	1	25	19	5	33	21	458	32	23	657	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1	25	19	5	33	21	458	32	23	657	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	1	25	19	5	33	21	458	32	23	657	16
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.04	0.96	1.00	0.12	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	78	1722	1700	218	1582	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.25	0.02	0.01	0.37	0.01
Crit Moves:					****		****				****	
Green/Cycle:	0.18	0.18	0.18	0.18	0.18	0.18	0.10	0.58	0.58	0.18	0.67	0.67
Volume/Cap:	0.04	0.08	0.08	0.06	0.11	0.11	0.13	0.44	0.03	0.07	0.55	0.01
Delay/Veh:	35.5	35.8	35.8	35.7	36.1	36.1	43.9	12.7	9.4	35.8	9.7	5.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.5	35.8	35.8	35.7	36.1	36.1	43.9	12.7	9.4	35.8	9.7	5.9
LOS by Move:	D	D	D	D	D	D	D	B	A	D	A	A
HCM2kAvgQ:	0	1	1	1	1	1	1	8	0	1	11	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: E[38.4]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		0 0 1! 0	0		1 0	1	0	1	1 0	0	1	0
Volume Module:														
Base Vol:	19	0	21	25	0	24	38	604	15		25	547	22	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
Initial Bse:	19	0	21	25	0	24	38	604	15		25	547	22	
Added Vol:	5	0	0	0	0	0	0	43	5		0	41	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	24	0	21	25	0	24	38	647	20		25	588	22	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95	0.95		0.95 0.95	0.95		
PHF Volume:	25	0	22	26	0	25	40	681	21		26	619	23	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	25	0	22	26	0	25	40	681	21		26	619	23	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1457	1455	681	1465	1465	630	642	xxxx	xxxxx		702	xxxx	xxxxx	
Potent Cap.:	109	131	454	107	129	485	952	xxxx	xxxxx		905	xxxx	xxxxx	
Move Cap.:	98	122	454	97	120	485	952	xxxx	xxxxx		905	xxxx	xxxxx	
Volume/Cap:	0.26	0.00	0.05	0.27	0.00	0.05	0.04	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx		9.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	154	xxxxx	xxxx	159	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	1.3	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	38.4	xxxxx	xxxxx	38.2	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*	*	E	*	*	*	*		*	*	*	
ApproachDel:	38.4			38.2			xxxxxx				xxxxxx			
ApproachLOS:	E			E			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	130	Critical Vol./Cap.(X):	0.401
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	19	19	19	19	19	19	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	19	0	21	25	0	24	38	604	15	25	547	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	0	21	25	0	24	38	604	15	25	547	22
Added Vol:	5	0	0	0	0	0	0	43	5	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	0	21	25	0	24	38	647	20	25	588	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	0	22	26	0	25	40	681	21	26	619	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	0	22	26	0	25	40	681	21	26	619	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	0	22	26	0	25	40	681	21	26	619	23
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	0	1800	1700	0	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.02	0.00	0.01	0.02	0.38	0.01	0.02	0.34	0.01
Crit Moves:				****			****				****	
Green/Cycle:	0.15	0.00	0.15	0.15	0.00	0.15	0.15	0.67	0.67	0.14	0.66	0.66
Volume/Cap:	0.10	0.00	0.08	0.11	0.00	0.10	0.16	0.56	0.02	0.11	0.52	0.02
Delay/Veh:	48.3	0.0	48.1	48.3	0.0	48.2	48.8	11.9	7.1	49.4	11.8	7.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.3	0.0	48.1	48.3	0.0	48.2	48.8	11.9	7.1	49.4	11.8	7.5
LOS by Move:	D	A	D	D	A	D	D	B	A	D	B	A
HCM2kAvgQ:	1	0	1	1	0	1	2	14	0	1	13	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	10	16	193	62	38	101	41	363	8	110	479	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	16	193	62	38	101	41	363	8	110	479	34
Added Vol:	3	0	0	0	0	4	3	9	2	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	16	193	62	38	105	44	372	10	110	490	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	16	20	236	76	47	129	54	456	12	135	600	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	20	236	76	47	129	54	456	12	135	600	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	20	236	76	47	129	54	456	12	135	600	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.13	0.04	0.03	0.07	0.03	0.13	0.01	0.08	0.17	0.02
Crit Moves:			****	****				****		****		
Green/Cycle:	0.10	0.29	0.29	0.10	0.29	0.29	0.10	0.42	0.42	0.10	0.42	0.42
Volume/Cap:	0.09	0.04	0.45	0.43	0.09	0.24	0.30	0.30	0.02	0.76	0.40	0.06
Delay/Veh:	39.1	24.4	28.3	42.0	24.8	26.2	40.8	18.8	16.5	59.2	19.8	16.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.1	24.4	28.3	42.0	24.8	26.2	40.8	18.8	16.5	59.2	19.8	16.8
LOS by Move:	D	C	C	D	C	C	D	B	B	E	B	B
HCM2kAvgQ:	1	0	6	3	1	3	2	4	0	6	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.396
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	19		55		197		58		32		50		120		516		13		85		461		65	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	19		55		197		58		32		50		120		516		13		85		461		65	
Added Vol:	7		0		0		0		0		8		9		27		7		0		26		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	26		55		197		58		32		58		129		543		20		85		487		65	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	27		56		202		60		33		60		132		557		21		87		500		67	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	27		56		202		60		33		60		132		557		21		87		500		67	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	27		56		202		60		33		60		132		557		21		87		500		67	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.03		0.08		0.15		0.01		0.05		0.14		0.04	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.16		0.11		0.40		0.35		0.07		0.12		0.56		0.36		0.03		0.48		0.35		0.09	
Delay/Veh:	41.6		26.9		29.7		43.2		26.5		26.9		43.0		19.2		16.3		43.9		21.0		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	41.6		26.9		29.7		43.2		26.5		26.9		43.0		19.2		16.3		43.9		21.0		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		1		5		6		0		3		5		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: E[41.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	33	6	1	6	4	612	20	18	611	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	33	6	1	6	4	612	20	18	611	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	26	2	33	6	1	6	4	621	20	18	622	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	30	2	38	7	1	7	5	721	23	21	722	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	30	2	38	7	1	7	5	721	23	21	722	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1503	1504	721	1527	1518	722	732	xxxx	xxxxx	744	xxxx	xxxxx												
Potent Cap.:	101	123	431	97	120	430	882	xxxx	xxxxx	872	xxxx	xxxxx												
Move Cap.:	96	119	431	85	117	430	882	xxxx	xxxxx	872	xxxx	xxxxx												
Volume/Cap:	0.31	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		168	xxxxx		xxxx		140	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		1.9	xxxxx		xxxxx		0.4	xxxxx		xxxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		41.3	xxxxx		xxxxx		33.8	xxxxx		xxxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*		E	*		*		D	*		*	*	*		*	*	*							
ApproachDel:			41.3					33.8				xxxxxx					xxxxxx							
ApproachLOS:			E					D				*					*							

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2020) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[20.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	33	6	1	6	4	602	20	19	610	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	33	6	1	6	4	602	20	19	610	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0												
Initial Fut:	26	0	35	0	0	13	0	621	21	19	621	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	30	0	41	0	0	15	0	721	24	22	721	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	30	0	41	0	0	15	0	721	24	22	721	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1499	1496	721	1519	1511	721	xxxx	xxxx	xxxxx	746	xxxx	xxxxx												
Potent Cap.:	102	124	431	98	121	431	xxxx	xxxx	xxxxx	872	xxxx	xxxxx												
Move Cap.:	96	121	431	87	118	431	xxxx	xxxx	xxxxx	872	xxxx	xxxxx												
Total Cap:	223	245	xxxxx	206	238	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	0.14	0.00	0.09	0.00	0.00	0.04	xxxx	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		309	xxxxx		xxxx		431	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		0.9	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Shrd ConDel:	xxxxx		20.1	xxxxx	xxxxx		13.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Shared LOS:	*		C	*	*		B	*	*	*	*	*	*	*										
ApproachDel:	20.1			13.7			xxxxxx			xxxxxx														
ApproachLOS:	C			B			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[43.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0		0	0	0 1! 0		0	1	0 1	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	693	53		39	590	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	20		7	2	11		10	693	53		39	590	8	
Added Vol:	0	0	0		0	0	0		0	27	0		0	26	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	30	0	20		7	2	11		10	720	53		39	616	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	30	0	20		7	2	11		10	731	54		40	625	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	30	0	20		7	2	11		10	731	54		40	625	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1466	1463	731		1492	1509	625		633	xxxx	xxxxx		784	xxxx	xxxxx	
Potent Cap.:	107	130	425		103	122	488		959	xxxx	xxxxx		843	xxxx	xxxxx	
Move Cap.:	99	122	425		94	115	488		959	xxxx	xxxxx		843	xxxx	xxxxx	
Volume/Cap:	0.31	0.00	0.05		0.08	0.02	0.02		0.01	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx		9.5	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	143	xxxxx		xxxx	174	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.5	xxxxx		xxxxx	0.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	43.6	xxxxx		xxxxx	28.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	43.6				28.4				xxxxxx				xxxxxx			
ApproachLOS:	E				D				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.9]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		0 0 1! 0	0		1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	30	0	20	7	2	11	10	693	53		39	590	0	8
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
Initial Bse:	30	0	20	7	2	11	10	693	53		39	590	0	8
Added Vol:	0	0	0	0	0	0	0	27	0		0	26	0	0
PasserByVol:	0	0	0	-7	-2	9	-10	17	2		0	0	0	0
Initial Fut:	30	0	20	0	0	20	0	737	55		39	616	0	8
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
PHF Adj:	0.99 0.99	0.99		0.99 0.99	0.99		0.99 0.99	0.99	0.99		0.99 0.99	0.99		
PHF Volume:	30	0	20	0	0	20	0	748	56		40	625	0	8
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	0
FinalVolume:	30	0	20	0	0	20	0	748	56		40	625	0	8
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1466	1460	748	1490	1508	625	xxxx	xxxx	xxxxx		804	xxxx	xxxxx	
Potent Cap.:	107	130	416	103	122	488	xxxx	xxxx	xxxxx		829	xxxx	xxxxx	
Move Cap.:	99	124	416	94	116	488	xxxx	xxxx	xxxxx		829	xxxx	xxxxx	
Total Cap:	226	248	xxxxx	209	229	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.13	0.00	0.05	0.00	0.00	0.04	xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.6	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	277	xxxxx	xxxx	488	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	20.9	xxxxx	xxxxx	12.7	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	B	*	*	*	*		*	*	*	
ApproachDel:	20.9			12.7			xxxxxx				xxxxxx			
ApproachLOS:	C			B			*				*			

Note: Queue reported is the number of cars per lane.

Opening Year (2021) With Project

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	12.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	16	4	66	12	29	0	5	281	31	205	214	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	4	66	12	29	0	5	281	31	205	214	11
Added Vol:	0	0	8	0	0	0	0	12	0	6	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	4	74	12	29	0	5	293	31	211	224	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	5	85	14	33	0	6	335	35	241	256	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	5	85	14	33	0	6	335	35	241	256	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	5	85	14	33	0	6	335	35	241	256	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.81	0.19	1.00	0.30	0.70	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1375	344	1800	518	1252	1800	1700	1800	1800	1700	1716	84
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.05	0.03	0.03	0.00	0.00	0.19	0.02	0.14	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.11	0.11	0.11	0.11	0.11	0.00	0.02	0.45	0.45	0.34	0.77	0.77
Volume/Cap:	0.12	0.12	0.42	0.23	0.23	0.00	0.19	0.42	0.04	0.42	0.19	0.19
Delay/Veh:	24.2	24.2	26.2	24.9	24.9	0.0	32.3	11.6	9.4	15.7	1.9	1.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.2	24.2	26.2	24.9	24.9	0.0	32.3	11.6	9.4	15.7	1.9	1.9
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	0	0	2	1	1	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.470
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.1
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	21	13	45				11	6	2				4	264	26				240	279	23			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	21	13	45				11	6	2				4	264	26				240	279	23			
Added Vol:	0	0	13				0	0	0				0	32	0				13	34	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	21	13	58				11	6	2				4	296	26				253	313	23			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	26	16	71				13	7	2				5	362	32				310	383	28			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	26	16	71				13	7	2				5	362	32				310	383	28			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	26	16	71				13	7	2				5	362	32				310	383	28			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.63	0.37	1.00				0.66	0.34	1.00				1.00	1.00	1.00				1.00	0.93	0.07			
Final Sat.:	1073	664	1800				1122	612	1800				1700	1800	1800				1700	1677	123			
Capacity Analysis Module:																								
Vol/Sat:	0.02	0.02	0.04				0.01	0.01	0.00				0.00	0.20	0.02				0.18	0.23	0.23			
Crit Moves:			****											****					****					
Green/Cycle:	0.08	0.08	0.08				0.08	0.08	0.08				0.01	0.43	0.43				0.39	0.81	0.81			
Volume/Cap:	0.29	0.29	0.47				0.14	0.14	0.02				0.28	0.47	0.04				0.47	0.28	0.28			
Delay/Veh:	26.9	26.9	28.5				25.9	25.9	25.3				38.3	12.7	10.0				14.3	1.6	1.6			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	26.9	26.9	28.5				25.9	25.9	25.3				38.3	12.7	10.0				14.3	1.6	1.6			
LOS by Move:	C	C	C				C	C	C				D	B	B				B	A	A			
HCM2kAvgQ:	1	1	2				0	0	0				0	5	0				5	2	2			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[18.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	41	5	44	14	3	17	17	310	39	26	416	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	5	44	14	3	17	17	310	39	26	416	32
Added Vol:	0	0	0	5	0	0	0	25	0	0	19	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	5	44	19	3	17	17	335	39	26	435	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	50	6	54	23	4	21	21	411	48	32	534	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	50	6	54	23	4	21	21	411	48	32	534	44
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	786	1096	206	849	1099	267	578	xxxx	xxxxx	459	xxxx	xxxxx
Potent Cap.:	286	215	807	258	214	737	1005	xxxx	xxxxx	1112	xxxx	xxxxx
Move Cap.:	264	205	807	226	204	737	1005	xxxx	xxxxx	1112	xxxx	xxxxx
Volume/Cap:	0.19	0.03	0.07	0.10	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	22.7	xxxx	xxxxx	8.7	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	384	xxxxx	xxxx	xxxx	529	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	18.1	xxxxx	xxxxx	xxxx	12.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	18.1			17.3			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[13.3]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	44	14	3	17	17	310	39	26	416	32								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	44	14	3	17	17	310	39	26	416	32								
Added Vol:	0	0	0	5	0	0	0	25	0	0	19	4								
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0	0	41	0								
Initial Fut:	0	0	85	5	0	17	17	335	39	26	476	36								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	0	0	104	6	0	21	21	411	48	32	585	44								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	104	6	0	21	21	411	48	32	585	44								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	809	1146	206	896	1150	292	629	xxxx	xxxxx	459	xxxx	xxxxx								
Potent Cap.:	275	201	807	238	200	710	963	xxxx	xxxxx	1112	xxxx	xxxxx								
Move Cap.:	257	191	807	200	190	710	963	xxxx	xxxxx	1112	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.13	0.03	0.00	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	23.6	xxxx	xxxxx	8.8	xxxx	xxxxx	8.3	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	807	xxxxx	xxxx	xxxx	710	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	B	*	*	*	B	*	*	*	*	*	*								
ApproachDel:	10.1			13.3			xxxxxx			xxxxxx										
ApproachLOS:	B			B			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 9.1 Worst Case Level Of Service: E[45.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	91	27	82	27	39	30	31	263	36	57	471	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	27	82	27	39	30	31	263	36	57	471	92
Added Vol:	0	0	0	8	0	0	0	52	0	0	55	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	27	82	35	39	30	31	315	36	57	526	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	96	29	87	37	41	32	33	333	38	60	555	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	96	29	87	37	41	32	33	333	38	60	555	106
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	817	1180	166	922	1112	278	661	xxxx	xxxxx	371	xxxx	xxxxx
Potent Cap.:	272	192	855	228	211	726	937	xxxx	xxxxx	1199	xxxx	xxxxx
Move Cap.:	204	176	855	168	193	726	937	xxxx	xxxxx	1199	xxxx	xxxxx
Volume/Cap:	0.47	0.16	0.10	0.22	0.21	0.04	0.03	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	32.3	xxxx	xxxxx	9.0	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	287	xxxxx	xxxx	xxxx	283	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	5.3	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	45.6	xxxxx	xxxxx	xxxx	22.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	C	*	*	*	*	*	*
ApproachDel:	45.6			25.5			xxxxxx			xxxxxx		
ApproachLOS:	E			D			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[14.9]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		57	471	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82	27	39	30	31	263	36		57	471	92	
Added Vol:	0	0	0	8	0	0	0	52	0		0	55	8	
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0		0	91	0	
Initial Fut:	0	0	173	8	0	30	31	315	36		57	617	100	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	183	8	0	32	33	333	38		60	652	106	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	183	8	0	32	33	333	38		60	652	106	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	844	1276	166	1004	1208	326	757	xxxx	xxxxx		371	xxxx	xxxxx	
Potent Cap.:	260	168	855	199	185	676	863	xxxx	xxxxx		1199	xxxx	xxxxx	
Move Cap.:	231	154	855	146	169	676	863	xxxx	xxxxx		1199	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.06	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	31.1	xxxx	xxxxx	9.3	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	855	xxxxx	xxxx	xxxx	676	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.4	xxxxx	xxxxx	xxxx	10.6	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.4			14.9			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.423
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 31.2
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0
Volume Module:																
Base Vol:	67	116	126		118	104	92		48	276	46		160	395	35	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	67	116	126		118	104	92		48	276	46		160	395	35	
Added Vol:	0	8	23		12	6	10		12	18	0		17	13	9	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	67	124	149		130	110	102		60	294	46		177	408	44	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	76	140	169		147	124	115		68	333	52		200	462	50	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	76	140	169		147	124	115		68	333	52		200	462	50	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	76	140	169		147	124	115		68	333	52		200	462	50	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.81	0.19	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3250	350	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.04	0.09		0.09	0.03	0.06		0.04	0.09	0.03		0.12	0.14	0.14	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.11	0.30	0.30		0.13	0.33	0.33		0.12	0.30	0.30		0.18	0.37	0.37	
Volume/Cap:	0.42	0.13	0.31		0.65	0.10	0.19		0.34	0.30	0.09		0.65	0.39	0.39	
Delay/Veh:	45.4	26.5	28.3		49.7	24.4	25.3		43.5	28.1	26.2		44.7	24.7	24.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	45.4	26.5	28.3		49.7	24.4	25.3		43.5	28.1	26.2		44.7	24.7	24.7	
LOS by Move:	D	C	C		D	C	C		D	C	C		D	C	C	
HCM2kAvgQ:	3	2	4		6	1	3		2	4	1		7	6	6	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.332
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	22.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	67	116	126	118	104	92	48	276	46	160	395	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	116	126	118	104	92	48	276	46	160	395	35
Added Vol:	0	8	23	12	6	10	12	18	0	17	13	9
PasserByVol:	0	5	0	10	5	0	39	-10	-2	0	0	0
Initial Fut:	67	129	149	140	115	102	99	284	44	177	408	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	76	146	169	158	130	115	112	321	50	200	462	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	146	169	158	130	115	112	321	50	200	462	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	146	169	158	130	115	112	321	50	200	462	50
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3250	350
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.09	0.09	0.04	0.06	0.07	0.09	0.03	0.12	0.14	0.14
Crit Moves:			****					****		****		
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.13	0.38	0.38	0.15	0.40	0.40
Volume/Cap:	0.12	0.11	0.25	0.25	0.10	0.17	0.51	0.24	0.07	0.77	0.35	0.35
Delay/Veh:	17.4	17.3	18.4	18.4	17.2	17.8	36.5	18.2	17.0	47.7	18.0	18.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.4	17.3	18.4	18.4	17.2	17.8	36.5	18.2	17.0	47.7	18.0	18.0
LOS by Move:	B	B	B	B	B	B	D	B	B	D	B	B
HCM2kAvgQ:	1	1	3	3	1	2	4	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.483
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	31.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	117	170	213	127	96	107	87	321	37	117	425	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	170	213	127	96	107	87	321	37	117	425	57
Added Vol:	0	21	37	19	23	34	32	29	0	37	29	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	117	191	250	146	119	141	119	350	37	154	454	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	126	205	268	157	128	151	128	375	40	165	487	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	205	268	157	128	151	128	375	40	165	487	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	205	268	157	128	151	128	375	40	165	487	82
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.71	0.29
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3084	516
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.15	0.09	0.04	0.08	0.08	0.10	0.02	0.10	0.16	0.16
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.34	0.34	0.12	0.34	0.34	0.11	0.34	0.34	0.12	0.35	0.35
Volume/Cap:	0.67	0.17	0.44	0.78	0.10	0.24	0.67	0.31	0.07	0.78	0.45	0.45
Delay/Veh:	49.3	22.2	25.1	58.6	21.2	22.5	49.2	23.5	21.4	57.4	24.2	24.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.3	22.2	25.1	58.6	21.2	22.5	49.2	23.5	21.4	57.4	24.2	24.2
LOS by Move:	D	C	C	E	C	C	D	C	C	E	C	C
HCM2kAvgQ:	5	2	6	7	1	3	5	4	1	7	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.479
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	23.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	117	170	213	127	96	107	87	321	37	117	425	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	170	213	127	96	107	87	321	37	117	425	57
Added Vol:	0	21	37	19	23	34	32	29	0	37	29	19
PasserByVol:	0	27	0	19	44	0	86	-19	-2	0	0	0
Initial Fut:	117	218	250	165	163	141	205	331	35	154	454	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	126	234	268	177	175	151	220	355	38	165	487	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	234	268	177	175	151	220	355	38	165	487	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	234	268	177	175	151	220	355	38	165	487	82
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.71	0.29
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3084	516
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.15	0.10	0.05	0.08	0.13	0.10	0.02	0.10	0.16	0.16
Crit Moves:			****				****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.42	0.42	0.13	0.34	0.34
Volume/Cap:	0.21	0.18	0.42	0.29	0.14	0.24	0.61	0.23	0.05	0.73	0.46	0.46
Delay/Veh:	20.4	20.1	22.4	21.1	19.7	20.6	35.3	16.7	15.3	49.4	23.2	23.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	20.1	22.4	21.1	19.7	20.6	35.3	16.7	15.3	49.4	23.2	23.2
LOS by Move:	C	C	C	C	B	C	D	B	B	D	C	C
HCM2kAvgQ:	3	2	6	4	2	3	7	3	1	6	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.387
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	67	300	152		20	220	72		34	48	29		90	94	26	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	67	300	152		20	220	72		34	48	29		90	94	26	
Added Vol:	0	21	0		0	16	8		10	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	67	321	152		20	236	80		44	48	29		90	94	26	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	82	391	185		24	288	98		54	59	35		110	115	32	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	82	391	185		24	288	98		54	59	35		110	115	32	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	82	391	185		24	288	98		54	59	35		110	115	32	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.49	0.51	1.00		0.44	0.44	0.12	
Final Sat.:	1700	1800	1800		1700	1800	1800		837	913	1800		752	786	217	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.22	0.10		0.01	0.16	0.05		0.06	0.06	0.02		0.15	0.15	0.15	
Crit Moves:		****												****		
Green/Cycle:	0.56	0.56	0.56		0.56	0.56	0.56		0.38	0.38	0.38		0.38	0.38	0.38	
Volume/Cap:	0.09	0.39	0.18		0.03	0.28	0.10		0.17	0.17	0.05		0.39	0.39	0.39	
Delay/Veh:	6.6	8.2	7.0		6.3	7.6	6.6		13.6	13.6	12.9		15.2	15.2	15.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.6	8.2	7.0		6.3	7.6	6.6		13.6	13.6	12.9		15.2	15.2	15.2	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	5	2		0	3	1		2	2	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.422
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.2
Optimal Cycle: OPTIMIZED		Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0 1		1 0 1	0 1		0 1	0 0 1		0 0 1!	0 0	
Volume Module:												
Base Vol:	58	444	234	17	106	99	31	39	21	54	52	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	444	234	17	106	99	31	39	21	54	52	35
Added Vol:	0	42	0	0	43	16	16	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	486	234	17	149	115	47	39	21	54	52	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	549	265	19	168	130	53	44	24	61	59	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	549	265	19	168	130	53	44	24	61	59	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	549	265	19	168	130	53	44	24	61	59	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44	1.00	0.40	0.36	0.24
Final Sat.:	1700	1800	1800	1700	1800	1800	953	791	1800	674	649	437
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.15	0.01	0.09	0.07	0.06	0.06	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.62	0.62	0.62	0.62	0.62	0.62	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.06	0.50	0.24	0.02	0.15	0.12	0.17	0.17	0.04	0.28	0.28	0.28
Delay/Veh:	5.0	7.3	5.7	4.9	5.4	5.2	15.9	15.9	15.1	16.6	16.6	16.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.0	7.3	5.7	4.9	5.4	5.2	15.9	15.9	15.1	16.6	16.6	16.6
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	2	2	0	3	3	3

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[21.0]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	676	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	676	1	
Added Vol:	4	0	4	4	0	3	4	52	5		5	46	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	7	0	10	6	0	3	4	526	7		15	722	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	9	0	12	7	0	4	5	643	9		18	883	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	9	0	12	7	0	4	5	643	9		18	883	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1579	1580	643	1583	1582	883	891	xxxx	xxxxx		652	xxxx	xxxxx	
Potent Cap.:	89	110	477	89	110	348	770	xxxx	xxxxx		944	xxxx	xxxxx	
Move Cap.:	87	107	477	85	107	348	770	xxxx	xxxxx		944	xxxx	xxxxx	
Total Cap:	206	226	xxxxx	204	225	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.04	0.00	0.03	0.04	0.00	0.01	0.01	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx		8.9	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	310	xxxxx	xxxx	237	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	17.5	xxxxx	xxxxx	21.0	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	17.5			21.0			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[22.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10		0		8		7		0		2		3		725		3		14		554		4	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10		0		8		7		0		2		3		725		3		14		554		4	
Added Vol:	8		0		8		8		0		6		6		104		8		8		102		8	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	18		0		16		15		0		8		9		829		11		22		656		12	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94		0.94	
PHF Volume:	19		0		17		16		0		9		10		885		12		23		700		13	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	19		0		17		16		0		9		10		885		12		23		700		13	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1662		1664		885		1666		1663		700		713	xxxx	xxxxx				897	xxxx	xxxxx			
Potent Cap.:	78		98		347		78		98		443		896	xxxx	xxxxx				766	xxxx	xxxxx			
Move Cap.:	74		94		347		72		94		443		896	xxxx	xxxxx				766	xxxx	xxxxx			
Total Cap:	194		213	xxxxx			183		208	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.10		0.00		0.05		0.09		0.00		0.02		0.01	xxxx		xxxx			0.03	xxxx		xxxx		
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.1	xxxx	xxxxx				9.9	xxxx	xxxxx			
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		245	xxxxx			xxxx		230	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.5	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		22.3	xxxxx			xxxxx		22.5	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*		*			*	*		*		
ApproachDel:	22.3						22.5						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[15.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	430	0	0	600	0	
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	0	0	0	0	0	430	0	0	600	0	
Added Vol:	8	0	4	0	0	0	54	5	5	49	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	8	0	4	0	0	0	484	5	5	649	0	
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.88 0.88	0.88	0.88	0.88	0.88	0.88	0.88 0.88	0.88	0.88	0.88	0.88	
PHF Volume:	9	0	5	0	0	0	550	6	6	738	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	9	0	5	0	0	0	550	6	6	738	0	
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1300 1300		550	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	556	xxxx	xxxxx
Potent Cap.:	180	163	538	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1025	xxxx	xxxxx
Move Cap.:	179	162	538	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1025	xxxx	xxxxx
Total Cap:	317	284	xxxxx	267	282	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 0.00		0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx	367	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	660	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	660	0	0	590	0
Added Vol:	16	0	8	0	0	0	0	112	8	8	102	0
PasserByVol:	19	0	3	0	0	0	0	0	18	2	0	0
Initial Fut:	35	0	11	0	0	0	0	772	26	10	692	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	37	0	12	0	0	0	0	817	28	11	732	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	37	0	12	0	0	0	0	817	28	11	732	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1570	1570	817	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	844	xxxx	xxxxx
Potent Cap.:	123	112	380	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	801	xxxx	xxxxx
Move Cap.:	122	110	380	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	801	xxxx	xxxxx
Total Cap:	261	235	xxxxx	207	227	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.14	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	282	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	20.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	20.4			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	600	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	600	0
Added Vol:	0	0	11	0	0	0	0	23	35	0	54	0
PasserByVol:	0	0	17	0	0	0	0	0	17	0	0	0
Initial Fut:	0	0	28	0	0	0	0	453	52	0	654	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	32	0	0	0	0	515	59	0	744	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	32	0	0	0	0	515	59	0	744	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	515	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	564	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	564	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	327	294	xxxxx	262	282	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[15.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	660	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	660	0	0	590	0
Added Vol:	0	0	24	0	0	0	0	64	56	0	110	0
PasserByVol:	0	0	20	0	0	0	0	0	20	0	0	0
Initial Fut:	0	0	44	0	0	0	0	724	76	0	700	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	47	0	0	0	0	766	80	0	740	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	47	0	0	0	0	766	80	0	740	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	766	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	406	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	406	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	275	248	xxxxx	202	233	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.4	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	15.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 5.1 Worst Case Level Of Service: E[48.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		28		16		4		30		20	394		26			19	570			18	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00		1.00
Initial Bse:	10		2		28		16		4		30		20	394		26			19	570			18	
Added Vol:	26		4		8		0		5		0		0	33		2			25	28			0	
PasserByVol:	0		2		0		0		2		0		0	0		15			15	0			0	
Initial Fut:	36		8		36		16		11		30		20	427		43			59	598			18	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00		1.00
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89	0.89			0.89		0.89
PHF Volume:	41		9		41		18		12		34		23	481		48			66	674			20	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	41		9		41		18		12		34		23	481		48			66	674			20	
Critical Gap Module:																								
Critical Gp:	7.1	6.5		6.2		7.1	6.5		6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0		3.3		3.5	4.0		3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																								
Cnflict Vol:	1367	1354		481		1392	1392		684		694	xxxx	xxxxx		530	xxxx	xxxxx							
Potent Cap.:	126	151		589		120	143		452		911	xxxx	xxxxx		1048	xxxx	xxxxx							
Move Cap.:	101	138		589		100	131		452		911	xxxx	xxxxx		1048	xxxx	xxxxx							
Volume/Cap:	0.40	0.07		0.07		0.18	0.09		0.07		0.02	xxxx	xxxx		0.06	xxxx	xxxx							
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		0.1	xxxx	xxxxx		0.2	xxxx	xxxxx							
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		9.1	xxxx	xxxxx		8.7	xxxx	xxxxx							
LOS by Move:	*	*		*		*	*		*		A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		168	xxxxx		xxxx		183	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		2.7	xxxxx		xxxxx		1.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		48.9	xxxxx		xxxxx		34.9	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*		E	*		*		D	*		*	*	*		*	*	*							
ApproachDel:		48.9					34.9					xxxxxx				xxxxxx								
ApproachLOS:		E					D					*				*								

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.445
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.1
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	10	2	28	16	4	30	20	394	26	19	570	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	2	28	16	4	30	20	394	26	19	570	18
Added Vol:	26	4	8	0	5	0	0	33	2	25	28	0
PasserByVol:	0	2	0	0	2	0	0	0	15	15	0	0
Initial Fut:	36	8	36	16	11	30	20	427	43	59	598	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	41	9	41	18	12	34	23	481	48	66	674	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	9	41	18	12	34	23	481	48	66	674	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	9	41	18	12	34	23	481	48	66	674	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.18	0.82	1.00	0.27	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	327	1473	1700	483	1317	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.01	0.03	0.03	0.01	0.27	0.03	0.04	0.37	0.01
Crit Moves:	****						****				****	
Green/Cycle:	0.21	0.21	0.21	0.21	0.21	0.21	0.11	0.55	0.55	0.17	0.61	0.61
Volume/Cap:	0.11	0.13	0.13	0.05	0.12	0.12	0.12	0.49	0.05	0.23	0.61	0.02
Delay/Veh:	28.8	29.0	29.0	28.4	28.9	28.9	36.3	12.8	9.4	32.5	11.9	6.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.8	29.0	29.0	28.4	28.9	28.9	36.3	12.8	9.4	32.5	11.9	6.9
LOS by Move:	C	C	C	C	C	C	D	B	A	C	B	A
HCM2kAvgQ:	1	1	1	0	1	1	1	8	1	2	12	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 33.0 Worst Case Level Of Service: F[399.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	19	0	21				25	0	24				38	604	15				25	547	22			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	19	0	21				25	0	24				38	604	15				25	547	22			
Added Vol:	53	8	16				0	8	0				0	83	5				40	57	0			
PasserByVol:	0	2	0				0	2	2				3	0	34				33	0	0			
Initial Fut:	72	10	37				25	10	26				41	687	54				98	604	22			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	76	11	39				26	11	27				43	723	57				103	636	23			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	76	11	39				26	11	27				43	723	57				103	636	23			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1682	1674	723				1716	1720	647				659	xxxx	xxxxx				780	xxxx	xxxxx			
Potent Cap.:	76	96	430				72	90	474				939	xxxx	xxxxx				846	xxxx	xxxxx			
Move Cap.:	56	81	430				52	76	474				939	xxxx	xxxxx				846	xxxx	xxxxx			
Volume/Cap:	1.35	0.13	0.09				0.51	0.14	0.06				0.05	xxxx	xxxx				0.12	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.4	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.8	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		80	xxxxx			xxxx		91	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		10.3	xxxxx			xxxxx		3.5	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		400	xxxxx			xxxxx		109	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		F	*			*	*	*				*	*	*			
ApproachDel:	399.8						109.0						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.541
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	17.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	19	0	21	25	0	24	38	604	15	25	547	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	0	21	25	0	24	38	604	15	25	547	22
Added Vol:	53	8	16	0	8	0	0	83	5	40	57	0
PasserByVol:	0	2	0	0	2	2	3	0	34	33	0	0
Initial Fut:	72	10	37	25	10	26	41	687	54	98	604	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	76	11	39	26	11	27	43	723	57	103	636	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	11	39	26	11	27	43	723	57	103	636	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	11	39	26	11	27	43	723	57	103	636	23
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.21	0.79	1.00	0.28	0.72	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	383	1417	1700	500	1300	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.04	0.03	0.03	0.02	0.02	0.02	0.03	0.40	0.03	0.06	0.35	0.01
Crit Moves:	****							****		****		
Green/Cycle:	0.20	0.20	0.20	0.20	0.20	0.20	0.17	0.63	0.63	0.11	0.57	0.57
Volume/Cap:	0.22	0.14	0.14	0.08	0.11	0.11	0.15	0.64	0.05	0.58	0.62	0.02
Delay/Veh:	32.2	31.4	31.4	31.0	31.2	31.2	33.9	12.0	6.7	45.1	14.9	9.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.2	31.4	31.4	31.0	31.2	31.2	33.9	12.0	6.7	45.1	14.9	9.0
LOS by Move:	C	C	C	C	C	C	C	B	A	D	B	A
HCM2kAvgQ:	2	1	1	1	1	1	1	13	1	4	13	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[9.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0	0	0	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0 40	0		0	50		0		0	0	0		0	0		0
Growth Adj:	1.00 1.00	1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	0 40	0		0	50		0		0	0	0		0	0		0
Added Vol:	15 3	0		0	2		30		34	0	11		0	0		0
PasserByVol:	6 0	0		0	0		17		17	0	6		0	0		0
Initial Fut:	21 43	0		0	52		47		51	0	17		0	0		0
User Adj:	1.00 1.00	1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.81 0.81	0.81		0.81	0.81		0.81		0.81	0.81	0.81		0.81	0.81		0.81
PHF Volume:	26 53	0		0	64		58		63	0	21		0	0		0
Reduct Vol:	0 0	0		0	0		0		0	0	0		0	0		0
FinalVolume:	26 53	0		0	64		58		63	0	21		0	0		0
Critical Gap Module:																
Critical Gp:	4.1 xxxx	xxxxx		xxxxx	xxxx		xxxxx		6.4	6.5	6.2		xxxxx	xxxx		xxxxx
FollowUpTim:	2.2 xxxx	xxxxx		xxxxx	xxxx		xxxxx		3.5	4.0	3.3		xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	122 xxxx	xxxxx		xxxx	xxxx		xxxxx		198	198	93		xxxx	xxxx		xxxxx
Potent Cap.:	1477 xxxx	xxxxx		xxxx	xxxx		xxxxx		795	701	969		xxxx	xxxx		xxxxx
Move Cap.:	1477 xxxx	xxxxx		xxxx	xxxx		xxxxx		784	688	969		xxxx	xxxx		xxxxx
Volume/Cap:	0.02 xxxx	xxxx		xxxx	xxxx		xxxx		0.08	0.00	0.02		xxxx	xxxx		xxxx
Level Of Service Module:																
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx
Control Del:	7.5 xxxx	xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx
LOS by Move:	A	*		*	*		*		*	*	*		*	*		*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT					
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx		xxxxx		xxxx	823	xxxxx		xxxx	xxxx		xxxxx
SharedQueue:	0.1 xxxx	xxxxx		xxxxx	xxxx		xxxxx		xxxxx	0.3	xxxxx		xxxxx	xxxx		xxxxx
Shrd ConDel:	7.5 xxxx	xxxxx		xxxxx	xxxx		xxxxx		xxxxx	9.9	xxxxx		xxxxx	xxxx		xxxxx
Shared LOS:	A	*		*	*		*		*	A	*		*	*		*
ApproachDel:	xxxxxx			xxxxxx					9.9				xxxxxx			
ApproachLOS:	*			*					A				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 5.3 Worst Case Level Of Service: B[11.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0 0		0 0 0	0 0	
Volume Module:												
Base Vol:	0 40	0		0 40	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 40	0		0 40	0		0 0	0		0 0	0	
Added Vol:	24 5	0		0 5	48		72 0	24		0 0	0	
PasserByVol:	13 0	0		0 0	37		39 0	14		0 0	0	
Initial Fut:	37 45	0		0 45	85		111 0	38		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85	
PHF Volume:	44 53	0		0 53	100		131 0	45		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	44 53	0		0 53	100		131 0	45		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		6.4 6.5	6.2		xxxxx xxxx	xxxxx	
FollowUpTim:	2.2 xxxx	xxxxx		xxxxx xxxx	xxxxx		3.5 4.0	3.3		xxxxx xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	153 xxxx	xxxxx		xxxx xxxx	xxxxx		243 243	103		xxxx xxxx	xxxxx	
Potent Cap.:	1440 xxxx	xxxxx		xxxx xxxx	xxxxx		750 662	957		xxxx xxxx	xxxxx	
Move Cap.:	1440 xxxx	xxxxx		xxxx xxxx	xxxxx		732 642	957		xxxx xxxx	xxxxx	
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.18 0.00	0.05		xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
Control Del:	7.6 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	
LOS by Move:	A	*		* *	*		* *	*		* *	*	
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx 779	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx 0.9	xxxxx		xxxxx xxxx	xxxxx	
Shrd ConDel:	7.6 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx 11.0	xxxxx		xxxxx xxxx	xxxxx	
Shared LOS:	A	*		* *	*		* B	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			11.0			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	26.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	28	28		10	28	28		10	40	40		10	40	40	
Lanes:	1 0	1	0	1	1 0	1	0	1	1 0	2	0	1	1 0	2	0	1
Volume Module:																
Base Vol:	10	16	193		62	38	101		41	363		8	110	479		34
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	10	16	193		62	38	101		41	363		8	110	479		34
Added Vol:	8	0	0		0	0	19		14	20		6	0	26		0
PasserByVol:	0	0	0		0	0	0		0	0		0	0	0		0
Initial Fut:	18	16	193		62	38	120		55	383		14	110	505		34
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82		0.82	0.82	0.82		0.82
PHF Volume:	22	20	236		76	47	147		67	469		17	135	619		42
Reduct Vol:	0	0	0		0	0	0		0	0		0	0	0		0
Reduced Vol:	22	20	236		76	47	147		67	469		17	135	619		42
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	22	20	236		76	47	147		67	469		17	135	619		42
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	2.00		1.00	1.00	2.00		1.00
Final Sat.:	1700	1800	1800		1700	1800	1800		1700	3600		1800	1700	3600		1800
Capacity Analysis Module:																
Vol/Sat:	0.01	0.01	0.13		0.04	0.03	0.08		0.04	0.13		0.01	0.08	0.17		0.02
Crit Moves:			****		****				****					****		
Green/Cycle:	0.10	0.29	0.29		0.10	0.29	0.29		0.10	0.42		0.42	0.10	0.42		0.42
Volume/Cap:	0.12	0.04	0.45		0.43	0.09	0.28		0.38	0.31		0.02	0.76	0.41		0.06
Delay/Veh:	39.3	24.4	28.3		42.0	24.8	26.5		41.5	18.9		16.5	59.2	19.9		16.8
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	39.3	24.4	28.3		42.0	24.8	26.5		41.5	18.9		16.5	59.2	19.9		16.8
LOS by Move:	D	C	C		D	C	C		D	B		B	E	B		B
HCM2kAvgQ:	1	0	6		3	1	3		2	5		0	6	7		1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	26.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	19	55	197	58	32	50	120	516	13	85	461	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	55	197	58	32	50	120	516	13	85	461	65
Added Vol:	15	0	0	0	0	32	33	51	15	0	50	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	55	197	58	32	82	153	567	28	85	511	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	35	56	202	60	33	84	157	582	29	87	525	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	56	202	60	33	84	157	582	29	87	525	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	56	202	60	33	84	157	582	29	87	525	67
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.05	0.09	0.16	0.02	0.05	0.15	0.04
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.21	0.11	0.40	0.35	0.07	0.17	0.66	0.37	0.04	0.48	0.36	0.09
Delay/Veh:	41.9	26.9	29.7	43.2	26.5	27.3	47.4	19.4	16.4	43.9	21.2	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.9	26.9	29.7	43.2	26.5	27.3	47.4	19.4	16.4	43.9	21.2	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	2	6	6	0	3	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: E[49.3]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	26	2	33	6	1	6	4	612	20	18	611	8								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	26	2	33	6	1	6	4	612	20	18	611	8								
Added Vol:	5	0	0	0	0	0	0	16	4	0	21	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	31	2	33	6	1	6	4	628	24	18	632	8								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86								
PHF Volume:	36	2	38	7	1	7	5	729	28	21	734	9								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	36	2	38	7	1	7	5	729	28	21	734	9								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1523	1524	729	1549	1542	734	743	xxxx	xxxxx	757	xxxx	xxxxx								
Potent Cap.:	98	119	426	94	116	423	873	xxxx	xxxxx	863	xxxx	xxxxx								
Move Cap.:	93	116	426	82	113	423	873	xxxx	xxxxx	863	xxxx	xxxxx								
Volume/Cap:	0.39	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.3	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		154	xxxxx		xxxx		135	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		2.4	xxxxx		xxxxx		0.4	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		49.3	xxxxx		xxxxx		34.9	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*		E	*		*		D	*		*	*	*	*		*	*	*		
ApproachDel:	49.3					34.9					xxxxxx					xxxxxx				
ApproachLOS:	E					D					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[21.6]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	26	2	33	6	1	6	4	612	20	18	611	8								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	26	2	33	6	1	6	4	612	20	18	611	8								
Added Vol:	5	0	0	0	0	0	0	16	4	0	21	0								
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0								
Initial Fut:	31	0	35	0	0	13	0	638	25	18	632	8								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86								
PHF Volume:	36	0	41	0	0	15	0	741	29	21	734	9								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	36	0	41	0	0	15	0	741	29	21	734	9								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1529	1526	741	1552	1546	734	xxxx	xxxx	xxxxx	770	xxxx	xxxxx								
Potent Cap.:	97	119	420	93	116	423	xxxx	xxxx	xxxxx	853	xxxx	xxxxx								
Move Cap.:	92	116	420	83	113	423	xxxx	xxxx	xxxxx	853	xxxx	xxxxx								
Total Cap:	218	240	xxxxx	201	232	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.17	0.00	0.10	0.00	0.00	0.04	xxxx	xxxx	xxxx	0.02	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	292	xxxxx	xxxx	423	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	21.6	xxxxx	xxxxx	13.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	C	*	*	B	*	*	*	*	*	*	*								
ApproachDel:	21.6			13.8			xxxxxx			xxxxxx										
ApproachLOS:	C			B			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: F[55.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30	0	20				7	2	11				10	693	53				39	590	8			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	30	0	20				7	2	11				10	693	53				39	590	8			
Added Vol:	8	0	0				0	0	0				0	43	8				0	42	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	38	0	20				7	2	11				10	736	61				39	632	8			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	39	0	20				7	2	11				10	747	62				40	641	8			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	39	0	20				7	2	11				10	747	62				40	641	8			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1498	1496	747				1529	1550	641				649	xxxx	xxxxx				809	xxxx	xxxxx			
Potent Cap.:	102	124	416				97	115	478				946	xxxx	xxxxx				826	xxxx	xxxxx			
Move Cap.:	94	117	416				88	108	478				946	xxxx	xxxxx				826	xxxx	xxxxx			
Volume/Cap:	0.41	0.00	0.05				0.08	0.02	0.02				0.01	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	xxxxx				9.6	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		128	xxxxx			xxxx		165	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		2.1	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		55.3	xxxxx			xxxxx		29.8	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		D	*			*	*	*				*	*	*			
ApproachDel:			55.3						29.8					xxxxxx						xxxxxx				
ApproachLOS:			F						D					*						*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2021) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[22.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0		0	0	0 1! 0		0	1	0 1	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	693	53		39	590	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	20		7	2	11		10	693	53		39	590	8	
Added Vol:	8	0	0		0	0	0		0	43	8		0	42	0	
PasserByVol:	0	0	0		-7	-2	9		-10	17	2		0	0	0	
Initial Fut:	38	0	20		0	0	20		0	753	63		39	632	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	39	0	20		0	0	20		0	764	64		40	641	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	39	0	20		0	0	20		0	764	64		40	641	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1499	1493	764		1527	1549	641		xxxx	xxxx	xxxxx		828	xxxx	xxxxx	
Potent Cap.:	102	124	407		97	115	478		xxxx	xxxx	xxxxx		812	xxxx	xxxxx	
Move Cap.:	94	118	407		89	110	478		xxxx	xxxx	xxxxx		812	xxxx	xxxxx	
Total Cap:	220	242	xxxxx		202	222	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.18	0.00	0.05		0.00	0.00	0.04		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.7	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	261	xxxxx		xxxx	478	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	22.7	xxxxx		xxxxx	12.9	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	B	*		*	*	*		*	*	*	
ApproachDel:	22.7				12.9				xxxxx				xxxxx			
ApproachLOS:	C				B				*				*			

Note: Queue reported is the number of cars per lane.

Opening Year (2022) Without Project

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.406
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.1
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	16	4	65				15	35	0				5	278	30				203	214	11			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	16	4	65				15	35	0				5	278	30				203	214	11			
Added Vol:	0	0	3				0	0	0				0	12	0				2	10	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	16	4	68				15	35	0				5	290	30				205	224	11			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88			
PHF Volume:	18	5	78				17	40	0				6	331	34				234	256	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	18	5	78				17	40	0				6	331	34				234	256	13			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	18	5	78				17	40	0				6	331	34				234	256	13			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.81	0.19	1.00				0.31	0.69	1.00				1.00	1.00	1.00				1.00	0.95	0.05			
Final Sat.:	1375	344	1800				531	1238	1800				1700	1800	1800				1700	1716	84			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.04				0.03	0.03	0.00				0.00	0.18	0.02				0.14	0.15	0.15			
Crit Moves:			****											****					****					
Green/Cycle:	0.11	0.11	0.11				0.11	0.11	0.00				0.02	0.45	0.45				0.34	0.78	0.78			
Volume/Cap:	0.12	0.12	0.41				0.30	0.30	0.00				0.19	0.41	0.04				0.41	0.19	0.19			
Delay/Veh:	24.6	24.6	26.4				25.7	25.7	0.0				32.2	11.3	9.1				15.6	1.8	1.8			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	24.6	24.6	26.4				25.7	25.7	0.0				32.2	11.3	9.1				15.6	1.8	1.8			
LOS by Move:	C	C	C				C	C	A				C	B	A				B	A	A			
HCM2kAvgQ:	1	1	2				1	1	0				0	4	0				4	1	1			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	10.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	21	13	45	11	6	2	4	264	26	240	279	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	45	11	6	2	4	264	26	240	279	23
Added Vol:	0	0	5	0	0	0	0	32	0	5	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	50	11	6	2	4	296	26	245	313	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	26	16	61	13	7	2	5	362	32	300	383	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	16	61	13	7	2	5	362	32	300	383	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	16	61	13	7	2	5	362	32	300	383	28
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.63	0.37	1.00	0.66	0.34	1.00	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	1073	664	1800	1122	612	1800	1700	1800	1800	1700	1677	123
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.03	0.01	0.01	0.00	0.00	0.20	0.02	0.18	0.23	0.23
Crit Moves:			****					****		****		
Green/Cycle:	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.44	0.44	0.39	0.82	0.82
Volume/Cap:	0.32	0.32	0.46	0.16	0.16	0.02	0.28	0.46	0.04	0.46	0.28	0.28
Delay/Veh:	27.8	27.8	29.1	26.6	26.6	25.8	38.1	12.2	9.6	14.3	1.4	1.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	27.8	29.1	26.6	26.6	25.8	38.1	12.2	9.6	14.3	1.4	1.4
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.8]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	44	14	3	18	18	310	39	26	416	32								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	44	14	3	18	18	310	39	26	416	32								
Added Vol:	0	0	0	0	0	0	0	15	0	0	12	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	41	5	44	14	3	18	18	325	39	26	428	32								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	50	6	54	17	4	22	22	399	48	32	526	39								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	50	6	54	17	4	22	22	399	48	32	526	39								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	772	1072	200	836	1081	263	565	xxxx	xxxxx	447	xxxx	xxxxx								
Potent Cap.:	293	222	814	263	220	742	1017	xxxx	xxxxx	1124	xxxx	xxxxx								
Move Cap.:	270	211	814	231	209	742	1017	xxxx	xxxxx	1124	xxxx	xxxxx								
Volume/Cap:	0.19	0.03	0.07	0.07	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	21.8	xxxx	xxxxx	8.6	xxxx	xxxxx	8.3	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	392	xxxxx	xxxx	xxxx	544	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	17.8	xxxxx	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*								
ApproachDel:	17.8			15.9			xxxxxx			xxxxxx										
ApproachLOS:	C			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	44	14	3	18	18	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	44	14	3	18	18	310	39		26	416	32	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	85	0	0	18	18	325	39		26	469	32	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	104	0	0	22	22	399	48		32	576	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	104	0	0	22	22	399	48		32	576	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	795	1123	200	884	1131	288	615	xxxx	xxxxx		447	xxxx	xxxxx	
Potent Cap.:	282	208	814	243	205	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Move Cap.:	262	197	814	204	195	715	974	xxxx	xxxxx		1124	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.00	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	814	xxxxx	xxxx	xxxx	715	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			10.2			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.4 Worst Case Level Of Service: E[40.6]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		57	471	92	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00			1.00 1.00	1.00		
Initial Bse:	91	27	82	27	39	30	31	263	36		57	471	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	91	27	82	27	39	30	31	299	36		57	510	92	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00			1.00 1.00	1.00		
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95			0.95 0.95	0.95		
PHF Volume:	96	29	87	29	41	32	33	316	38		60	539	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	96	29	87	29	41	32	33	316	38		60	539	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	792	1137	158	897	1078	269	636	xxxx	xxxxx		354	xxxx	xxxxx	
Potent Cap.:	283	203	866	238	220	735	957	xxxx	xxxxx		1216	xxxx	xxxxx	
Move Cap.:	215	187	866	178	202	735	957	xxxx	xxxxx		1216	xxxx	xxxxx	
Volume/Cap:	0.45	0.15	0.10	0.16	0.20	0.04	0.03	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	29.1	xxxx	xxxxx	8.9	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	302	xxxxx	xxxx	xxxx	295	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	4.9	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	40.6	xxxxx	xxxxx	xxxx	21.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*	*	*	C	*	*	*		*	*	*	
ApproachDel:	40.6			23.4			xxxxxx				xxxxxx			
ApproachLOS:	E			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		57	471	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82	27	39	30	31	263	36		57	471	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0		0	91	0	
Initial Fut:	0	0	173	0	0	30	31	299	36		57	601	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	183	0	0	32	33	316	38		60	635	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	183	0	0	32	33	316	38		60	635	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	819	1233	158	978	1174	317	732	xxxx	xxxxx		354	xxxx	xxxxx	
Potent Cap.:	271	178	866	208	193	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Move Cap.:	242	163	866	153	177	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	866	xxxxx	xxxx	xxxx	684	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			10.5			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.393
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	69	116	127	117	106	92	49	276	46	167	397	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	116	127	117	106	92	49	276	46	167	397	36
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	124	130	119	112	102	61	279	46	169	399	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	78	140	147	135	127	115	69	316	52	191	452	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	140	147	135	127	115	69	316	52	191	452	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	140	147	135	127	115	69	316	52	191	452	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3294	306
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.08	0.08	0.04	0.06	0.04	0.09	0.03	0.11	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.12	0.32	0.32	0.16	0.37	0.37
Volume/Cap:	0.43	0.12	0.26	0.68	0.11	0.19	0.34	0.27	0.09	0.68	0.37	0.37
Delay/Veh:	43.5	24.1	25.4	52.1	23.3	24.2	41.6	25.5	23.9	46.2	23.5	23.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.5	24.1	25.4	52.1	23.3	24.2	41.6	25.5	23.9	46.2	23.5	23.5
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	3	6	1	3	2	4	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.308
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	21.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2 0	1		1 0	2 0	1		1 0	2 0	1		1 0	1 1	0	
Volume Module:																
Base Vol:	69	116	127		117	106	92		49	276	46		167	397	36	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	69	116	127		117	106	92		49	276	46		167	397	36	
Added Vol:	0	8	3		2	6	10		12	3	0		2	2	1	
PasserByVol:	0	5	0		10	5	0		39	-10	-2		0	0	0	
Initial Fut:	69	129	130		129	117	102		100	269	44		169	399	37	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	78	146	147		146	132	115		113	304	50		191	452	42	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	78	146	147		146	132	115		113	304	50		191	452	42	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	78	146	147		146	132	115		113	304	50		191	452	42	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.83	0.17	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3294	306	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.04	0.08		0.09	0.04	0.06		0.07	0.08	0.03		0.11	0.14	0.14	
Crit Moves:			****							****			****			
Green/Cycle:	0.38	0.38	0.38		0.38	0.38	0.38		0.13	0.38	0.38		0.15	0.40	0.40	
Volume/Cap:	0.12	0.11	0.22		0.23	0.10	0.17		0.52	0.22	0.07		0.74	0.34	0.34	
Delay/Veh:	17.4	17.3	18.2		18.3	17.2	17.8		36.6	18.1	17.0		44.8	17.9	17.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.4	17.3	18.2		18.3	17.2	17.8		36.6	18.1	17.0		44.8	17.9	17.9	
LOS by Move:	B	B	B		B	B	B		D	B	B		D	B	B	
HCM2kAvgQ:	1	1	3		3	1	2		4	3	1		7	5	5	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.429
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	29.4
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	119	171	220	128	96	109	88	322	36	118	425	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	171	220	128	96	109	88	322	36	118	425	57
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	119	192	225	131	119	143	120	327	36	123	430	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	128	206	241	141	128	153	129	351	39	132	461	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	206	241	141	128	153	129	351	39	132	461	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	206	241	141	128	153	129	351	39	132	461	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3159	441
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.13	0.08	0.04	0.09	0.08	0.10	0.02	0.08	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.67	0.16	0.39	0.76	0.10	0.25	0.68	0.28	0.06	0.71	0.42	0.42
Delay/Veh:	48.5	20.8	23.0	56.6	20.5	21.8	48.9	21.8	20.0	52.0	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	20.8	23.0	56.6	20.5	21.8	48.9	21.8	20.0	52.0	23.3	23.3
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	5	6	1	3	5	4	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.450
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	23.0
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	119	171	220	128	96	109	88	322	36	118	425	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	171	220	128	96	109	88	322	36	118	425	57
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	27	0	19	44	0	86	-19	-2	0	0	0
Initial Fut:	119	219	225	150	163	143	206	308	34	123	430	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	128	235	241	161	175	153	221	330	36	132	461	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	235	241	161	175	153	221	330	36	132	461	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	235	241	161	175	153	221	330	36	132	461	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3159	441
Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.13	0.09	0.05	0.09	0.13	0.09	0.02	0.08	0.15	0.15
Crit Moves:			****				****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.42	0.42	0.13	0.34	0.34
Volume/Cap:	0.21	0.18	0.38	0.27	0.14	0.24	0.62	0.22	0.05	0.59	0.42	0.42
Delay/Veh:	20.4	20.1	22.0	20.9	19.7	20.6	35.4	16.6	15.3	40.7	22.9	22.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	20.1	22.0	20.9	19.7	20.6	35.4	16.6	15.3	40.7	22.9	22.9
LOS by Move:	C	C	C	C	B	C	D	B	B	D	C	C
HCM2kAvgQ:	3	2	5	3	2	3	7	3	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.380
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	67	299	150	21	224	75	34	48	28	88	94	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	299	150	21	224	75	34	48	28	88	94	27
Added Vol:	0	11	0	0	9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	310	150	21	233	75	34	48	28	88	94	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	82	378	183	26	284	91	41	59	34	107	115	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	378	183	26	284	91	41	59	34	107	115	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	378	183	26	284	91	41	59	34	107	115	33
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.43	0.57	1.00	0.43	0.44	0.13
Final Sat.:	1700	1800	1800	1700	1800	1800	729	1029	1800	740	790	227
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.10	0.02	0.16	0.05	0.06	0.06	0.02	0.15	0.15	0.15
Crit Moves:		****									****	
Green/Cycle:	0.55	0.55	0.55	0.55	0.55	0.55	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.09	0.38	0.18	0.03	0.29	0.09	0.15	0.15	0.05	0.38	0.38	0.38
Delay/Veh:	6.4	7.9	6.8	6.1	7.3	6.4	12.3	12.3	11.7	13.8	13.8	13.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.4	7.9	6.8	6.1	7.3	6.4	12.3	12.3	11.7	13.8	13.8	13.8
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	4	2	0	3	1	1	1	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle: OPTIMIZED		Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0 1		1 0 1	0 1		0 1	0 0 1		0 0 1!	0 0	
Volume Module:												
Base Vol:	58	452	233	18	108	103	31	39	20	52	54	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	452	233	18	108	103	31	39	20	52	54	37
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	478	233	18	135	103	31	39	20	52	54	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	540	263	20	153	116	35	44	23	59	61	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	540	263	20	153	116	35	44	23	59	61	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	540	263	20	153	116	35	44	23	59	61	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.46	0.54	1.00	0.38	0.37	0.25
Final Sat.:	1700	1800	1800	1700	1800	1800	777	977	1800	641	665	456
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.15	0.01	0.08	0.06	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.07	0.51	0.25	0.02	0.15	0.11	0.13	0.13	0.04	0.26	0.26	0.26
Delay/Veh:	5.4	7.9	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.9	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.8]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	686	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	686	1	
Added Vol:	0	0	0	4	0	3	4	12	0		0	17	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	486	2		10	703	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	594	2		12	860	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	594	2		12	860	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1494	1496	594	1494	1491	860	867	xxxx	xxxxx		597	xxxx	xxxxx	
Potent Cap.:	102	124	508	103	125	359	785	xxxx	xxxxx		990	xxxx	xxxxx	
Move Cap.:	100	122	508	100	122	359	785	xxxx	xxxxx		990	xxxx	xxxxx	
Total Cap:	222	241	xxxxx	222	242	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	355	xxxxx	xxxx	255	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.5	xxxxx	xxxxx	19.8	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.5			19.8			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		1 0 1 0	1		1 0 1 0	1	
Volume Module:												
Base Vol:	10	0	8	7	0	2	3	735	3	14	564	4
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	10	0	8	7	0	2	3	735	3	14	564	4
Added Vol:	0	0	0	8	0	6	6	40	0	0	38	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	0	8	15	0	8	9	775	3	14	602	12
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.94 0.94	0.94		0.94 0.94	0.94		0.94 0.94	0.94		0.94 0.94	0.94	
PHF Volume:	11	0	9	16	0	9	10	827	3	15	643	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	0	9	16	0	9	10	827	3	15	643	13
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1530	1532	827	1525	1522	643	655	xxxx	xxxxx	830	xxxx	xxxxx
Potent Cap.:	97	118	374	98	120	477	941	xxxx	xxxxx	810	xxxx	xxxxx
Move Cap.:	93	115	374	93	116	477	941	xxxx	xxxxx	810	xxxx	xxxxx
Total Cap:	217	236	xxxxx	214	235	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.05 0.00	0.02		0.07 0.00	0.02		0.01	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	267	xxxxx	xxxx	264	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.5	xxxxx	xxxxx	20.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:		19.5			20.0		xxxxxx			xxxxxx		
ApproachLOS:		C			C		*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: C[24.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		28		16		4		30		20	394		26			20	580			18	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00		1.00
Initial Bse:	10		2		28		16		4		30		20	394		26			20	580			18	
Added Vol:	3		0		0		0		0		0		0	14		2			0	19			0	
PasserByVol:	0		0		0		0		0		0		0	0		0			0	0			0	
Initial Fut:	13		2		28		16		4		30		20	408		28			20	599			18	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00		1.00
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89	0.89			0.89		0.89
PHF Volume:	15		2		32		18		5		34		23	460		32			23	675			20	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	15		2		32		18		5		34		23	460		32			23	675			20	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx		xxxxx			4.1	xxxx			xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx		xxxxx			2.2	xxxx			xxxxx	
Capacity Module:																								
Cnflict Vol:	1254		1245		460		1268		1267		685		695	xxxx		xxxxx			491	xxxx			xxxxx	
Potent Cap.:	150		175		606		147		170		451		910	xxxx		xxxxx			1082	xxxx			xxxxx	
Move Cap.:	131		168		606		133		163		451		910	xxxx		xxxxx			1082	xxxx			xxxxx	
Volume/Cap:	0.11	0.01		0.05		0.14	0.03		0.07		0.02	xxxx		xxxx			0.02	xxxx		xxxx				
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			0.1	xxxx		xxxxx			0.1	xxxx			xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			9.1	xxxx		xxxxx			8.4	xxxx			xxxxx	
LOS by Move:	*	*		*		*	*		*			A	*		*			A	*			*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		273	xxxxx		xxxx		237	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx		0.6	xxxxx		xxxxx		0.9	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx		21.0	xxxxx		xxxxx		24.9	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx					
Shared LOS:	*		C	*		*		C	*			*	*	*			*	*	*					
ApproachDel:	21.0					24.9						xxxxxx					xxxxxx							
ApproachLOS:	C					C						*					*							

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	13.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	10	2	28	16	4	30	20	394	26	20	580	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	2	28	16	4	30	20	394	26	20	580	18
Added Vol:	3	0	0	0	0	0	0	14	2	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	2	28	16	4	30	20	408	28	20	599	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	15	2	32	18	5	34	23	460	32	23	675	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	2	32	18	5	34	23	460	32	23	675	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	2	32	18	5	34	23	460	32	23	675	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.07	0.93	1.00	0.12	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	120	1680	1700	212	1588	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.26	0.02	0.01	0.38	0.01
Crit Moves:					****			****			****	
Green/Cycle:	0.18	0.18	0.18	0.18	0.18	0.18	0.10	0.58	0.58	0.18	0.67	0.67
Volume/Cap:	0.05	0.10	0.10	0.06	0.12	0.12	0.14	0.44	0.03	0.07	0.56	0.02
Delay/Veh:	35.6	36.0	36.0	35.7	36.1	36.1	43.9	12.7	9.4	35.8	9.9	5.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.6	36.0	36.0	35.7	36.1	36.1	43.9	12.7	9.4	35.8	9.9	5.9
LOS by Move:	D	D	D	D	D	D	D	B	A	D	A	A
HCM2kAvgQ:	0	1	1	1	1	1	1	8	0	1	12	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: E[43.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	24	0	26				26	0	24				39	618	16				24	552	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	24	0	26				26	0	24				39	618	16				24	552	21			
Added Vol:	5	0	0				0	0	0				0	43	5				0	41	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	29	0	26				26	0	24				39	661	21				24	593	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	31	0	27				27	0	25				41	696	22				25	624	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	31	0	27				27	0	25				41	696	22				25	624	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1476	1474	696				1488	1485	635				646	xxxx	xxxxx				718	xxxx	xxxxx			
Potent Cap.:	105	128	445				103	126	482				949	xxxx	xxxxx				893	xxxx	xxxxx			
Move Cap.:	95	119	445				92	117	482				949	xxxx	xxxxx				893	xxxx	xxxxx			
Volume/Cap:	0.32	0.00	0.06				0.30	0.00	0.05				0.04	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.2	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		151	xxxxx			xxxx		150	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.6	xxxxx			xxxxx		1.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		43.1	xxxxx			xxxxx		41.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		E	*			*	*	*				*	*	*			
ApproachDel:	43.1						41.4						xxxxxx						xxxxxx					
ApproachLOS:	E						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 85 Critical Vol./Cap.(X): 0.451
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 15.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	19	19	19		19	19	19		10	32	32		10	32	32	
Lanes:	1 0	0	1	0	1 0	0	1	0	1 0	1	0	1	1 0	1	0	1
Volume Module:																
Base Vol:	24	0	26		26	0	24		39	618	16		24	552	21	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	24	0	26		26	0	24		39	618	16		24	552	21	
Added Vol:	5	0	0		0	0	0		0	43	5		0	41	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	29	0	26		26	0	24		39	661	21		24	593	21	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	31	0	27		27	0	25		41	696	22		25	624	22	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	31	0	27		27	0	25		41	696	22		25	624	22	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	31	0	27		27	0	25		41	696	22		25	624	22	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	0.00	1.00		1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat.:	1700	0	1800		1700	0	1800		1700	1800	1800		1700	1800	1800	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.00	0.02		0.02	0.00	0.01		0.02	0.39	0.01		0.01	0.35	0.01	
Crit Moves:	****									****			****			
Green/Cycle:	0.22	0.00	0.22		0.22	0.00	0.22		0.17	0.59	0.59		0.12	0.54	0.54	
Volume/Cap:	0.08	0.00	0.07		0.07	0.00	0.06		0.14	0.66	0.02		0.13	0.64	0.02	
Delay/Veh:	26.2	0.0	26.1		26.1	0.0	26.1		30.4	13.3	7.3		33.9	15.4	9.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	26.2	0.0	26.1		26.1	0.0	26.1		30.4	13.3	7.3		33.9	15.4	9.2	
LOS by Move:	C	A	C		C	A	C		C	B	A		C	B	A	
HCM2kAvgQ:	1	0	1		1	0	1		1	13	0		1	12	0	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.415
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	10	15	193	65	39	106	40	361	8	110	484	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	15	193	65	39	106	40	361	8	110	484	34
Added Vol:	3	0	0	0	0	4	3	9	2	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	15	193	65	39	110	43	370	10	110	495	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	16	18	236	80	48	135	53	453	12	135	606	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	18	236	80	48	135	53	453	12	135	606	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	18	236	80	48	135	53	453	12	135	606	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.13	0.05	0.03	0.07	0.03	0.13	0.01	0.08	0.17	0.02
Crit Moves:			****	****				****		****		
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.11	0.38	0.38	0.17	0.44	0.44
Volume/Cap:	0.09	0.04	0.47	0.47	0.10	0.27	0.28	0.33	0.02	0.47	0.38	0.05
Delay/Veh:	43.3	27.8	32.3	46.8	28.3	30.0	43.8	23.2	20.3	40.8	20.1	17.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.3	27.8	32.3	46.8	28.3	30.0	43.8	23.2	20.3	40.8	20.1	17.0
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	B
HCM2kAvgQ:	1	0	7	3	1	3	2	5	0	5	7	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.398
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	19	55	197	59	32	51	122	519	14	84	460	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	55	197	59	32	51	122	519	14	84	460	63
Added Vol:	7	0	0	0	0	8	9	27	7	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	55	197	59	32	59	131	546	21	84	486	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	27	56	202	61	33	61	134	561	22	86	499	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	56	202	61	33	61	134	561	22	86	499	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	56	202	61	33	61	134	561	22	86	499	65
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.03	0.08	0.16	0.01	0.05	0.14	0.04
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.16	0.11	0.40	0.36	0.07	0.12	0.57	0.36	0.03	0.47	0.35	0.09
Delay/Veh:	41.6	26.9	29.7	43.3	26.5	26.9	43.3	19.2	16.3	43.8	21.0	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.6	26.9	29.7	43.3	26.5	26.9	43.3	19.2	16.3	43.8	21.0	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	1	5	6	0	3	5	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: E[42.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26		2		33		6		1		6		4		612		20		19		620		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	26		2		33		6		1		6		4		612		20		19		620		8	
Added Vol:	0		0		0		0		0		0		0		9		0		0		11		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	26		2		33		6		1		6		4		621		20		19		631		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86	
PHF Volume:	30		2		38		7		1		7		5		721		23		22		733		9	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	30		2		38		7		1		7		5		721		23		22		733		9	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1516		1517		721		1539		1531		733		742		xxxx		xxxxx		744		xxxx		xxxxx	
Potent Cap.:	99		120		431		95		118		424		874		xxxx		xxxxx		872		xxxx		xxxxx	
Move Cap.:	94		117		431		83		114		424		874		xxxx		xxxxx		872		xxxx		xxxxx	
Volume/Cap:	0.32		0.02		0.09		0.08		0.01		0.02		0.01		xxxx		xxxx		0.03		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.1		xxxx		xxxxx		9.2		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		165		xxxxx		xxxx		137		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		1.9		xxxxx		xxxxx		0.4		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		42.3		xxxxx		xxxxx		34.5		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		E		*		*		D		*		*		*		*		*		*		*	
ApproachDel:	42.3						34.5						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[20.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0		0	0	0 1! 0		0	1	0 1	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	26	2	33	6	1	6		4	612	20		19	620	8		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		
Initial Bse:	26	2	33	6	1	6		4	612	20		19	620	8		
Added Vol:	0	0	0	0	0	0		0	9	0		0	11	0		
PasserByVol:	0	-2	2	-6	-1	7		-4	10	1		0	0	0		
Initial Fut:	26	0	35	0	0	13		0	631	21		19	631	8		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86		
PHF Volume:	30	0	41	0	0	15		0	733	24		22	733	9		
Reduct Vol:	0	0	0	0	0	0		0	0	0		0	0	0		
FinalVolume:	30	0	41	0	0	15		0	733	24		22	733	9		
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1522	1519	733	1542	1534	733		xxxx	xxxx	xxxxx		757	xxxx	xxxxx		
Potent Cap.:	98	120	424	95	117	424		xxxx	xxxx	xxxxx		863	xxxx	xxxxx		
Move Cap.:	93	117	424	84	114	424		xxxx	xxxx	xxxxx		863	xxxx	xxxxx		
Total Cap:	219	241	xxxxx	202	234	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
Volume/Cap:	0.14	0.00	0.10	0.00	0.00	0.04		xxxx	xxxx	xxxx		0.03	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.3	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*		*	*	*		A	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		
Shared Cap.:	xxxx	303	xxxxx	xxxx	424	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	20.5	xxxxx	xxxxx	13.8	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*	C	*	*	B	*		*	*	*		*	*	*		
ApproachDel:	20.5			13.8				xxxxxx				xxxxxx				
ApproachLOS:	C			B				*				*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[43.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		693		54		39		590		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		693		54		39		590		8	
Added Vol:	0		0		0		0		0		0		0		27		0		0		26		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	30		0		20		7		2		11		10		720		54		39		616		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	30		0		20		7		2		11		10		731		55		40		625		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	30		0		20		7		2		11		10		731		55		40		625		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1466		1463		731		1493		1510		625		633		xxxx		xxxxx		785		xxxx		xxxxx	
Potent Cap.:	107		130		425		103		122		488		959		xxxx		xxxxx		842		xxxx		xxxxx	
Move Cap.:	99		122		425		93		115		488		959		xxxx		xxxxx		842		xxxx		xxxxx	
Volume/Cap:	0.31		0.00		0.05		0.08		0.02		0.02		0.01		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.8		xxxx		xxxxx		9.5		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		143		xxxxx		xxxx		174		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		1.5		xxxxx		xxxxx		0.4		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		43.6		xxxxx		xxxxx		28.4		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		E		*		*		D		*		*		*		*		*		*		*	
ApproachDel:	43.6						28.4						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0		0	0	0 1! 0		0	1	0 1	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	693	54		39	590	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	20		7	2	11		10	693	54		39	590	8	
Added Vol:	0	0	0		0	0	0		0	27	0		0	26	0	
PasserByVol:	0	0	0		-7	-2	9		-10	17	2		0	0	0	
Initial Fut:	30	0	20		0	0	20		0	737	56		39	616	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	30	0	20		0	0	20		0	748	57		40	625	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	30	0	20		0	0	20		0	748	57		40	625	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1466	1460	748		1491	1509	625		xxxx	xxxx	xxxxx		805	xxxx	xxxxx	
Potent Cap.:	107	130	416		103	122	488		xxxx	xxxx	xxxxx		828	xxxx	xxxxx	
Move Cap.:	99	124	416		94	116	488		xxxx	xxxx	xxxxx		828	xxxx	xxxxx	
Total Cap:	226	248	xxxxx		209	229	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.13	0.00	0.05		0.00	0.00	0.04		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.6	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	277	xxxxx		xxxx	488	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.7	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	20.9	xxxxx		xxxxx	12.7	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	B	*		*	*	*		*	*	*	
ApproachDel:	20.9				12.7				xxxxx				xxxxx			
ApproachLOS:	C				B				*				*			

Note: Queue reported is the number of cars per lane.

Opening Year (2022) With Project

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.413
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	12.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 1	0	0 1		0 1	0	0 1		1	0 1	0	1	1	0	0 1	0
Volume Module:																
Base Vol:	16	4	65		15	35	0		5	278	30		203	214	11	
Growth Adj:	1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00		
Initial Bse:	16	4	65		15	35	0		5	278	30		203	214	11	
Added Vol:	0	0	9		0	0	0		0	12	0		6	10	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	16	4	74		15	35	0		5	290	30		209	224	11	
User Adj:	1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00		
PHF Adj:	0.88 0.88	0.88			0.88 0.88	0.88			0.88 0.88	0.88			0.88 0.88	0.88		
PHF Volume:	18	5	85		17	40	0		6	331	34		239	256	13	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	18	5	85		17	40	0		6	331	34		239	256	13	
PCE Adj:	1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00		
MLF Adj:	1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00		
FinalVolume:	18	5	85		17	40	0		6	331	34		239	256	13	
Saturation Flow Module:																
Sat/Lane:	1800 1800	1800			1800 1800	1800			1800 1800	1800			1800 1800	1800		
Adjustment:	0.94 1.00	1.00			0.94 1.00	1.00			0.94 1.00	1.00			0.94 1.00	1.00		
Lanes:	0.81 0.19	1.00			0.31 0.69	1.00			1.00 1.00	1.00			1.00 0.95	0.05		
Final Sat.:	1375 344	1800			531 1238	1800			1700 1800	1800			1700 1716	84		
Capacity Analysis Module:																
Vol/Sat:	0.01 0.01	0.05			0.03 0.03	0.00			0.00 0.18	0.02			0.14 0.15	0.15		
Crit Moves:		****								****			****			
Green/Cycle:	0.11 0.11	0.11			0.11 0.11	0.00			0.02 0.45	0.45			0.34 0.77	0.77		
Volume/Cap:	0.12 0.12	0.41			0.28 0.28	0.00			0.19 0.41	0.04			0.41 0.19	0.19		
Delay/Veh:	24.1 24.1	26.1			25.1 25.1	0.0			32.3 11.6	9.4			15.7 2.0	2.0		
User DelAdj:	1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00			1.00 1.00	1.00		
AdjDel/Veh:	24.1 24.1	26.1			25.1 25.1	0.0			32.3 11.6	9.4			15.7 2.0	2.0		
LOS by Move:	C	C	C		C	C	A		C	B	A		B	A	A	
HCM2kAvgQ:	0	0	2		1	1	0		0	4	0		4	1	1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	11.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	21	13	45	11	6	2	4	264	26	240	279	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	45	11	6	2	4	264	26	240	279	23
Added Vol:	0	0	14	0	0	0	0	32	0	14	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	59	11	6	2	4	296	26	254	313	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	26	16	72	13	7	2	5	362	32	311	383	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	16	72	13	7	2	5	362	32	311	383	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	16	72	13	7	2	5	362	32	311	383	28
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.63	0.37	1.00	0.66	0.34	1.00	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	1073	664	1800	1122	612	1800	1700	1800	1800	1700	1677	123
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.04	0.01	0.01	0.00	0.00	0.20	0.02	0.18	0.23	0.23
Crit Moves:			****					****		****		
Green/Cycle:	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.43	0.43	0.39	0.80	0.80
Volume/Cap:	0.28	0.28	0.47	0.14	0.14	0.02	0.28	0.47	0.04	0.47	0.28	0.28
Delay/Veh:	26.8	26.8	28.4	25.9	25.9	25.2	38.3	12.8	10.1	14.3	1.6	1.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.8	26.8	28.4	25.9	25.9	25.2	38.3	12.8	10.1	14.3	1.6	1.6
LOS by Move:	C	C	C	C	C	C	D	B	B	B	A	A
HCM2kAvgQ:	1	1	2	0	0	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[18.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	41	5	44	14	3	18	18	310	39	26	416	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	5	44	14	3	18	18	310	39	26	416	32
Added Vol:	0	0	0	6	0	0	0	26	0	0	20	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	5	44	20	3	18	18	336	39	26	436	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	50	6	54	25	4	22	22	413	48	32	535	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	50	6	54	25	4	22	22	413	48	32	535	44
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	790	1100	206	853	1104	268	580	xxxx	xxxxx	461	xxxx	xxxxx
Potent Cap.:	284	214	806	256	213	736	1004	xxxx	xxxxx	1111	xxxx	xxxxx
Move Cap.:	261	203	806	224	202	736	1004	xxxx	xxxxx	1111	xxxx	xxxxx
Volume/Cap:	0.19	0.03	0.07	0.11	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	23.0	xxxx	xxxxx	8.7	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	381	xxxxx	xxxx	xxxx	535	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	18.3	xxxxx	xxxxx	xxxx	12.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	18.3			17.4			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[13.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0 1	0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	44	14	3	18	18	310	39		26	416	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	44	14	3	18	18	310	39		26	416	32	
Added Vol:	0	0	0	6	0	0	0	26	0		0	20	4	
PasserByVol:	-41	-5	41	-14	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	85	6	0	18	18	336	39		26	477	36	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	104	7	0	22	22	413	48		32	586	44	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	104	7	0	22	22	413	48		32	586	44	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	814	1151	206	900	1155	293	630	xxxx	xxxxx		461	xxxx	xxxxx	
Potent Cap.:	273	200	806	237	199	710	962	xxxx	xxxxx		1111	xxxx	xxxxx	
Move Cap.:	254	189	806	198	189	710	962	xxxx	xxxxx		1111	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.04	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	23.9	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	806	xxxxx	xxxx	xxxx	710	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			13.7			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 9.2 Worst Case Level Of Service: E[46.3]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0	0 1	0	1	0	2	0	1	1	0	2	0	1	
Volume Module:																		
Base Vol:	91	27	82	27	39	30	31	263	36				57	471	92			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	91	27	82	27	39	30	31	263	36				57	471	92			
Added Vol:	0	0	0	9	0	0	0	54	0				0	57	9			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	91	27	82	36	39	30	31	317	36				57	528	101			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	96	29	87	38	41	32	33	335	38				60	558	107			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	96	29	87	38	41	32	33	335	38				60	558	107			
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	820	1185	167	925	1116	279	664	xxxx	xxxxx				373	xxxx	xxxxx			
Potent Cap.:	270	191	854	227	209	724	934	xxxx	xxxxx				1197	xxxx	xxxxx			
Move Cap.:	203	175	854	167	192	724	934	xxxx	xxxxx				1197	xxxx	xxxxx			
Volume/Cap:	0.47	0.16	0.10	0.23	0.21	0.04	0.04	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	0.1	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	32.7	xxxx	xxxxx	9.0	xxxx	xxxxx				8.2	xxxx	xxxxx			
LOS by Move:	*	*	*	D	*	*	A	*	*				A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	286	xxxxx	xxxx	xxxx	282	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	5.4	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	46.3	xxxxx	xxxxx	xxxx	22.2	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	E	*	*	*	C	*	*	*				*	*	*			
ApproachDel:	46.3			25.8			xxxxxx						xxxxxx					
ApproachLOS:	E			D			*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[15.4]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1				1 0 2 0 1			
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		57	471	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82	27	39	30	31	263	36		57	471	92	
Added Vol:	0	0	0	9	0	0	0	54	0		0	57	9	
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0		0	91	0	
Initial Fut:	0	0	173	9	0	30	31	317	36		57	619	101	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	183	10	0	32	33	335	38		60	654	107	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	183	10	0	32	33	335	38		60	654	107	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	848	1281	167	1007	1212	327	760	xxxx	xxxxx		373	xxxx	xxxxx	
Potent Cap.:	258	167	854	198	184	675	861	xxxx	xxxxx		1197	xxxx	xxxxx	
Move Cap.:	230	153	854	145	168	675	861	xxxx	xxxxx		1197	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.07	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	31.5	xxxx	xxxxx	9.3	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	854	xxxxx	xxxx	xxxx	675	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.4	xxxxx	xxxxx	xxxx	10.6	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.4			15.4			xxxxxx				xxxxxx			
ApproachLOS:	B			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.433
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	31.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	69	116	127	117	106	92	49	276	46	167	397	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	116	127	117	106	92	49	276	46	167	397	36
Added Vol:	0	8	25	13	6	10	12	20	0	18	14	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	124	152	130	112	102	61	296	46	185	411	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	78	140	172	147	127	115	69	335	52	209	465	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	140	172	147	127	115	69	335	52	209	465	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	140	172	147	127	115	69	335	52	209	465	52
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3238	362
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.10	0.09	0.04	0.06	0.04	0.09	0.03	0.12	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.12	0.33	0.33	0.12	0.32	0.32	0.16	0.37	0.37
Volume/Cap:	0.43	0.12	0.30	0.75	0.11	0.19	0.34	0.29	0.09	0.75	0.39	0.39
Delay/Veh:	43.5	24.1	25.9	57.5	23.4	24.2	41.6	25.6	23.9	50.5	23.6	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.5	24.1	25.9	57.5	23.4	24.2	41.6	25.6	23.9	50.5	23.6	23.6
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	4	6	1	3	2	4	1	8	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.339
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	22.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	69	116	127	117	106	92	49	276	46	167	397	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	116	127	117	106	92	49	276	46	167	397	36
Added Vol:	0	8	25	13	6	10	12	20	0	18	14	10
PasserByVol:	0	5	0	10	5	0	39	-10	-2	0	0	0
Initial Fut:	69	129	152	140	117	102	100	286	44	185	411	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	78	146	172	158	132	115	113	324	50	209	465	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	146	172	158	132	115	113	324	50	209	465	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	146	172	158	132	115	113	324	50	209	465	52
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3238	362
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.10	0.09	0.04	0.06	0.07	0.09	0.03	0.12	0.14	0.14
Crit Moves:			****					****		****		
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.14	0.36	0.36	0.20	0.42	0.42
Volume/Cap:	0.13	0.11	0.27	0.26	0.10	0.18	0.49	0.25	0.08	0.62	0.34	0.34
Delay/Veh:	19.7	19.5	20.9	20.8	19.4	20.1	37.7	20.6	19.3	36.2	17.8	17.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.7	19.5	20.9	20.8	19.4	20.1	37.7	20.6	19.3	36.2	17.8	17.8
LOS by Move:	B	B	C	C	B	C	D	C	B	D	B	B
HCM2kAvgQ:	2	1	3	3	1	2	4	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.497
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 31.7
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2 0	1		1 0	2 0	1		1 0	2 0	1		1 0	1 1	0	
Volume Module:																
Base Vol:	119	171	220		128	96	109		88	322	36		118	425	57	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	119	171	220		128	96	109		88	322	36		118	425	57	
Added Vol:	0	21	41		21	23	34		32	32	0		41	32	21	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	119	192	261		149	119	143		120	354	36		159	457	78	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	128	206	280		160	128	153		129	380	39		171	490	84	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	128	206	280		160	128	153		129	380	39		171	490	84	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	128	206	280		160	128	153		129	380	39		171	490	84	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.71	0.29	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3075	525	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.06	0.16		0.09	0.04	0.09		0.08	0.11	0.02		0.10	0.16	0.16	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.11	0.34	0.34		0.12	0.34	0.34		0.11	0.34	0.34		0.12	0.35	0.35	
Volume/Cap:	0.68	0.17	0.46		0.80	0.10	0.25		0.67	0.31	0.06		0.80	0.46	0.46	
Delay/Veh:	50.2	22.2	25.3		61.3	21.3	22.6		49.5	23.5	21.4		59.8	24.2	24.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	50.2	22.2	25.3		61.3	21.3	22.6		49.5	23.5	21.4		59.8	24.2	24.2	
LOS by Move:	D	C	C		E	C	C		D	C	C		E	C	C	
HCM2kAvgQ:	5	2	7		7	1	3		5	4	1		7	7	7	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	24.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	119	171	220	128	96	109	88	322	36	118	425	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	171	220	128	96	109	88	322	36	118	425	57
Added Vol:	0	21	41	21	23	34	32	32	0	41	32	21
PasserByVol:	0	27	0	19	44	0	86	-19	-2	0	0	0
Initial Fut:	119	219	261	168	163	143	206	335	34	159	457	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	128	235	280	180	175	153	221	359	36	171	490	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	235	280	180	175	153	221	359	36	171	490	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	235	280	180	175	153	221	359	36	171	490	84
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.71	0.29
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3075	525
Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.16	0.11	0.05	0.09	0.13	0.10	0.02	0.10	0.16	0.16
Crit Moves:			****				****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.42	0.42	0.13	0.34	0.34
Volume/Cap:	0.21	0.18	0.44	0.30	0.14	0.24	0.62	0.24	0.05	0.76	0.46	0.46
Delay/Veh:	20.4	20.1	22.6	21.2	19.7	20.6	35.4	16.7	15.3	51.5	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	20.1	22.6	21.2	19.7	20.6	35.4	16.7	15.3	51.5	23.3	23.3
LOS by Move:	C	C	C	C	B	C	D	B	B	D	C	C
HCM2kAvgQ:	3	2	6	4	2	3	7	3	1	7	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.386
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	9.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	67	299	150	21	224	75	34	48	28	88	94	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	299	150	21	224	75	34	48	28	88	94	27
Added Vol:	0	22	0	0	17	8	11	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	321	150	21	241	83	45	48	28	88	94	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	82	391	183	26	294	101	55	59	34	107	115	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	391	183	26	294	101	55	59	34	107	115	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	391	183	26	294	101	55	59	34	107	115	33
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	1.00	0.43	0.44	0.13
Final Sat.:	1700	1800	1800	1700	1800	1800	847	903	1800	740	790	227
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.10	0.02	0.16	0.06	0.06	0.06	0.02	0.15	0.15	0.15
Crit Moves:		****									****	
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.09	0.39	0.18	0.03	0.29	0.10	0.17	0.17	0.05	0.39	0.39	0.39
Delay/Veh:	6.6	8.2	7.0	6.3	7.6	6.6	13.7	13.7	12.9	15.2	15.2	15.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.6	8.2	7.0	6.3	7.6	6.6	13.7	13.7	12.9	15.2	15.2	15.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	5	2	0	3	1	2	2	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.430
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	58	452	233	18	108	103	31	39	20	52	54	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	452	233	18	108	103	31	39	20	52	54	37
Added Vol:	0	44	0	0	46	18	18	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	496	233	18	154	121	49	39	20	52	54	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	561	263	20	174	137	55	44	23	59	61	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	561	263	20	174	137	55	44	23	59	61	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	561	263	20	174	137	55	44	23	59	61	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.57	0.43	1.00	0.38	0.37	0.25
Final Sat.:	1700	1800	1800	1700	1800	1800	970	772	1800	641	665	456
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.15	0.01	0.10	0.08	0.06	0.06	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.62	0.62	0.62	0.62	0.62	0.62	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.06	0.51	0.24	0.02	0.16	0.12	0.18	0.18	0.04	0.28	0.28	0.28
Delay/Veh:	5.0	7.4	5.7	4.9	5.4	5.3	15.9	15.9	15.1	16.7	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.0	7.4	5.7	4.9	5.4	5.3	15.9	15.9	15.1	16.7	16.7	16.7
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	7	2	0	2	1	2	2	0	3	3	3

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[21.3]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	686	1	
Growth Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	686	1	
Added Vol:	4	0	8	4	0	3	4	45	17		5	49	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	7	0	14	6	0	3	4	519	19		15	735	6	
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82 0.82	0.82	0.82	0.82 0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	9	0	17	7	0	4	5	635	23		18	899	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	9	0	17	7	0	4	5	635	23		18	899	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1586	1588	635	1601	1604	899	906	xxxx	xxxxx		658	xxxx	xxxxx	
Potent Cap.:	88	109	482	86	107	340	759	xxxx	xxxxx		939	xxxx	xxxxx	
Move Cap.:	86	106	482	82	104	340	759	xxxx	xxxxx		939	xxxx	xxxxx	
Total Cap:	204	224	xxxxx	200	221	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.04	0.00	0.04	0.04	0.00	0.01	0.01	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.8	xxxx	xxxxx		8.9	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	332	xxxxx	xxxx	232	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	16.8	xxxxx	xxxxx	21.3	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	16.8			21.3			xxxxx				xxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[23.6]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		0 0 1! 0	0		1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	10	0	8	7	0	2	3	735	3		14	564	4	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
Initial Bse:	10	0	8	7	0	2	3	735	3		14	564	4	
Added Vol:	9	0	18	8	0	6	6	94	27		9	111	8	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	19	0	26	15	0	8	9	829	30		23	675	12	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00 1.00	1.00		
PHF Adj:	0.94 0.94	0.94		0.94 0.94	0.94		0.94 0.94	0.94	0.94		0.94 0.94	0.94		
PHF Volume:	20	0	28	16	0	9	10	885	32		25	720	13	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	20	0	28	16	0	9	10	885	32		25	720	13	
Critical Gap Module:														
Critical Gp:	7.1 6.5	6.2		7.1 6.5	6.2		4.1 xxxx	xxxxx			4.1 xxxx	xxxxx		
FollowUpTim:	3.5 4.0	3.3		3.5 4.0	3.3		2.2 xxxx	xxxxx			2.2 xxxx	xxxxx		
Capacity Module:														
Cnflict Vol:	1684 1686	885		1703 1706	720		733 xxxx	xxxxx			917 xxxx	xxxxx		
Potent Cap.:	75 95	347		73 92	431		881 xxxx	xxxxx			752 xxxx	xxxxx		
Move Cap.:	72 91	347		65 88	431		881 xxxx	xxxxx			752 xxxx	xxxxx		
Total Cap:	190 210	xxxxx		173 201	xxxxx		xxxx xxxx	xxxxx			xxxx xxxx	xxxxx		
Volume/Cap:	0.11 0.00	0.08		0.09 0.00	0.02		0.01 xxxx	xxxx			0.03 xxxx	xxxx		
Level Of Service Module:														
2Way95thQ:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		0.0 xxxx	xxxxx			0.1 xxxx	xxxxx		
Control Del:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		9.1 xxxx	xxxxx			9.9 xxxx	xxxxx		
LOS by Move:	* *	*		* *	*		A	*	*		A	*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx 257	xxxxx		xxxx 218	xxxxx		xxxx xxxx	xxxxx			xxxx xxxx	xxxxx		
SharedQueue:	xxxxx 0.7	xxxxx		xxxxx 0.4	xxxxx		xxxxx xxxx	xxxxx			xxxxx xxxx	xxxxx		
Shrd ConDel:	xxxxx 22.2	xxxxx		xxxxx 23.6	xxxxx		xxxxx xxxx	xxxxx			xxxxx xxxx	xxxxx		
Shared LOS:	* C	*		* C	*		*	*	*		*	*	*	
ApproachDel:	22.2			23.6			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[13.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 1	0	1	1 0 1	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	610	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	610	0
Added Vol:	4	0	12	0	0	0	0	41	17	6	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	0	12	0	0	0	0	471	17	6	666	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	5	0	14	0	0	0	0	536	19	7	757	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	0	14	0	0	0	0	536	19	7	757	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1306	1306	536	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	555	xxxx	xxxxx
Potent Cap.:	178	161	549	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1026	xxxx	xxxxx
Move Cap.:	177	160	549	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1026	xxxx	xxxxx
Total Cap:	314	282	xxxxx	260	277	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	462	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	13.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[20.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 1	0	1	1 0 1	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	670	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	670	0	0	590	0
Added Vol:	9	0	27	0	0	0	0	93	27	9	119	0
PasserByVol:	31	0	3	0	0	0	0	0	29	2	0	0
Initial Fut:	40	0	30	0	0	0	0	763	56	11	709	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	42	0	32	0	0	0	0	807	59	12	750	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	42	0	32	0	0	0	0	807	59	12	750	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1580	1580	807	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	866	xxxx	xxxxx
Potent Cap.:	121	110	385	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	786	xxxx	xxxxx
Move Cap.:	120	109	385	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	786	xxxx	xxxxx
Total Cap:	259	233	xxxxx	193	220	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.16	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	301	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	20.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	20.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[11.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	610	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	610	0
Added Vol:	0	0	8	0	0	0	0	36	16	0	61	0
PasserByVol:	0	0	17	0	0	0	0	0	17	0	0	0
Initial Fut:	0	0	25	0	0	0	0	466	33	0	671	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	28	0	0	0	0	530	38	0	763	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	28	0	0	0	0	530	38	0	763	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	530	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	553	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	553	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	319	286	xxxxx	258	279	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[15.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	670	0	0	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	670	0	0	590	0
Added Vol:	0	0	18	0	0	0	0	94	27	0	128	0
PasserByVol:	0	0	20	0	0	0	0	0	20	0	0	0
Initial Fut:	0	0	38	0	0	0	0	764	47	0	718	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	40	0	0	0	0	808	50	0	759	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	40	0	0	0	0	808	50	0	759	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	808	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	384	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	384	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	263	237	xxxxx	196	228	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	15.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.5			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: F[65.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		28		16		4		30		20	394		26			20	580			18	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00			1.00	
Initial Bse:	10		2		28		16		4		30		20	394		26			20	580			18	
Added Vol:	32		4		0		0		0		6		0	43		2			33	24			0	
PasserByVol:	0		2		0		0		2		0		0	0		15			15	0			0	
Initial Fut:	42		8		28		16		6		36		20	437		43			68	604			18	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00			1.00	
PHF Adj:	0.89	0.89		0.89			0.89	0.89		0.89			0.89	0.89		0.89			0.89	0.89			0.89	
PHF Volume:	47		9		32		18		7		41		23	493		48			77	681			20	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	47		9		32		18		7		41		23	493		48			77	681			20	
Critical Gap Module:																								
Critical Gp:	7.1	6.5		6.2			7.1	6.5		6.2			4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0		3.3			3.5	4.0		3.3			2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1405	1392		493			1426	1430		691			701	xxxx	xxxxx				541	xxxx	xxxxx			
Potent Cap.:	118	143		580			114	136		448			905	xxxx	xxxxx				1038	xxxx	xxxxx			
Move Cap.:	95	129		580			95	123		448			905	xxxx	xxxxx				1038	xxxx	xxxxx			
Volume/Cap:	0.50	0.07		0.05			0.19	0.06		0.09			0.02	xxxx	xxxx				0.07	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			0.1	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			9.1	xxxx	xxxxx				8.7	xxxx	xxxxx			
LOS by Move:	*	*		*			*	*		*			A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		142	xxxxx			xxxx		194	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		3.3	xxxxx			xxxxx		1.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		65.1	xxxxx			xxxxx		32.6	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		D	*			*	*	*				*	*	*			
ApproachDel:		65.1						32.6						xxxxxx						xxxxxx				
ApproachLOS:		F						D						*						*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	10	2	28	16	4	30	20	394	26	20	580	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	2	28	16	4	30	20	394	26	20	580	18
Added Vol:	32	4	0	0	0	6	0	43	2	33	24	0
PasserByVol:	0	2	0	0	2	0	0	0	15	15	0	0
Initial Fut:	42	8	28	16	6	36	20	437	43	68	604	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	47	9	32	18	7	41	23	493	48	77	681	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	9	32	18	7	41	23	493	48	77	681	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	9	32	18	7	41	23	493	48	77	681	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.22	0.78	1.00	0.14	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	400	1400	1700	257	1543	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.02	0.02	0.01	0.03	0.03	0.01	0.27	0.03	0.05	0.38	0.01
Crit Moves:	****						****				****	
Green/Cycle:	0.21	0.21	0.21	0.21	0.21	0.21	0.11	0.55	0.55	0.17	0.61	0.61
Volume/Cap:	0.13	0.11	0.11	0.05	0.12	0.12	0.12	0.50	0.05	0.26	0.62	0.02
Delay/Veh:	29.0	28.8	28.8	28.4	28.9	28.9	36.3	12.9	9.4	32.8	12.0	6.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.0	28.8	28.8	28.4	28.9	28.9	36.3	12.9	9.4	32.8	12.0	6.9
LOS by Move:	C	C	C	C	C	C	D	B	A	C	B	A
HCM2kAvgQ:	1	1	1	0	1	1	1	9	1	2	12	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 71.1 Worst Case Level Of Service: F[693.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	24	0	26				26	0	24				39	618	16				24	552	21			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	24	0	26				26	0	24				39	618	16				24	552	21			
Added Vol:	69	9	0				0	0	9				0	107	5				54	50	0			
PasserByVol:	0	3	34				0	3	2				3	0	0				39	0	0			
Initial Fut:	93	12	60				26	3	35				42	725	21				117	602	21			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	98	13	63				27	3	37				44	763	22				123	634	22			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	98	13	63				27	3	37				44	763	22				123	634	22			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1762	1753	763				1791	1764	645				656	xxxx	xxxxx				785	xxxx	xxxxx			
Potent Cap.:	67	86	408				63	85	476				941	xxxx	xxxxx				843	xxxx	xxxxx			
Move Cap.:	51	70	408				40	69	476				941	xxxx	xxxxx				843	xxxx	xxxxx			
Volume/Cap:	1.93	0.18	0.15				0.69	0.05	0.08				0.05	xxxx	xxxx				0.15	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.5	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				10.0	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		77	xxxxx			xxxx		83	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		16.1	xxxxx			xxxxx		4.1	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		694	xxxxx			xxxxx		138	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		F	*			*	*	*				*	*	*			
ApproachDel:	693.7						138.4						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	22.1
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	19	19	19		19	19	19		10	32	32		10	32	32	
Lanes:	1 0	0	1	0	1 0	0	1	0	1 0	1	0	1	1 0	1	0	1
Volume Module:																
Base Vol:	24	0	26		26	0	24		39	618	16		24	552	21	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	24	0	26		26	0	24		39	618	16		24	552	21	
Added Vol:	69	9	0		0	0	9		0	107	5		54	50	0	
PasserByVol:	0	3	34		0	3	2		3	0	0		39	0	0	
Initial Fut:	93	12	60		26	3	35		42	725	21		117	602	21	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	98	13	63		27	3	37		44	763	22		123	634	22	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	98	13	63		27	3	37		44	763	22		123	634	22	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	98	13	63		27	3	37		44	763	22		123	634	22	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	0.17	0.83		1.00	0.08	0.92		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat.:	1700	300	1500		1700	142	1658		1700	1800	1800		1700	1800	1800	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.04	0.04		0.02	0.02	0.02		0.03	0.42	0.01		0.07	0.35	0.01	
Crit Moves:	****									****			****			
Green/Cycle:	0.28	0.28	0.28		0.28	0.28	0.28		0.15	0.48	0.48		0.15	0.48	0.48	
Volume/Cap:	0.20	0.15	0.15		0.06	0.08	0.08		0.17	0.89	0.03		0.49	0.74	0.03	
Delay/Veh:	18.5	18.1	18.1		17.5	17.7	17.7		25.2	27.0	9.3		27.6	17.5	9.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	18.5	18.1	18.1		17.5	17.7	17.7		25.2	27.0	9.3		27.6	17.5	9.3	
LOS by Move:	B	B	B		B	B	B		C	C	A		C	B	A	
HCM2kAvgQ:	2	1	1		0	1	1		1	18	0		3	12	0	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: B[10.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0 40	0		0 50	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 40	0		0 50	0		0 0	0		0 0	0	
Added Vol:	17 3	0		0 24	11		33 0	4		0 0	0	
PasserByVol:	6 0	0		0 0	17		17 0	6		0 0	0	
Initial Fut:	23 43	0		0 74	28		50 0	10		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.81 0.81	0.81		0.81 0.81	0.81		0.81 0.81	0.81		0.81 0.81	0.81	
PHF Volume:	28 53	0		0 91	35		62 0	12		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	28 53	0		0 91	35		62 0	12		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	xxxxx		xxxx xxxxx			6.4 6.5	6.2		xxxxx xxxx	xxxxx	
FollowUpTim:	2.2 xxxx xxxxx	xxxxx		xxxx xxxxx			3.5 4.0	3.3		xxxxx xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	126 xxxx xxxxx	xxxx		xxxx xxxxx			219 219	109		xxxx xxxx	xxxxx	
Potent Cap.:	1473 xxxx xxxxx	xxxx		xxxx xxxxx			774 683	950		xxxx xxxx	xxxxx	
Move Cap.:	1473 xxxx xxxxx	xxxx		xxxx xxxxx			762 670	950		xxxx xxxx	xxxxx	
Volume/Cap:	0.02 xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.08 0.00	0.01		xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx	xxxx		xxxx xxxxx	xxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
Control Del:	7.5 xxxx xxxxx	xxxxx		xxxx xxxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
LOS by Move:	A *	*		* *	*		* *	*		* *	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx 788	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.1 xxxx xxxxx	xxxxx		xxxx xxxx	xxxxx		xxxxx 0.3	xxxxx		xxxxx xxxx	xxxxx	
Shrd ConDel:	7.5 xxxx xxxxx	xxxxx		xxxx xxxx	xxxxx		xxxxx 10.0	xxxxx		xxxxx xxxx	xxxxx	
Shared LOS:	A *	*		* *	*		* B	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			10.0			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 5.3 Worst Case Level Of Service: B[11.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	50	0	0	40	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	50	0	0	40	0	0	0	0	0	0	0
Added Vol:	27	5	0	0	41	18	73	0	9	0	0	0
PasserByVol:	18	0	0	0	0	22	45	0	6	0	0	0
Initial Fut:	45	55	0	0	81	40	118	0	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	53	65	0	0	95	47	139	0	18	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	53	65	0	0	95	47	139	0	18	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	142	xxxx	xxxxx	xxxx	xxxx	xxxxx	289	289	119	xxxx	xxxx	xxxxx
Potent Cap.:	1453	xxxx	xxxxx	xxxx	xxxx	xxxxx	705	624	938	xxxx	xxxx	xxxxx
Move Cap.:	1453	xxxx	xxxxx	xxxx	xxxx	xxxxx	685	601	938	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.20	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	707	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.5			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	0	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	40	0				0	50	0				0	0	0				0	0	0			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	40	0				0	50	0				0	0	0				0	0	0			
Added Vol:	0	20	0				0	6	22				0	0	8				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	60	0				0	56	22				0	0	8				0	0	0			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.81	0.81	0.81				0.81	0.81	0.81				0.81	0.81	0.81				0.81	0.81	0.81			
PHF Volume:	0	74	0				0	69	27				0	0	10				0	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	74	0				0	69	27				0	0	10				0	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx	xxxx	6.2				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx	xxxx	3.3				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	83				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	982				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	982				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	0.01				xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	0.0				xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx	xxxx	8.7				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				*	*	A				*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						8.7						xxxxxx					
ApproachLOS:	*						*						A						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[8.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	0	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	50	0				0	40	0				0	0	0				0	0	0			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	50	0				0	40	0				0	0	0				0	0	0			
Added Vol:	0	32	0				0	14	36				0	0	18				0	0	0			
PasserByVol:	0	0	0				0	0	25				0	0	12				0	0	0			
Initial Fut:	0	82	0				0	54	61				0	0	30				0	0	0			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.85	0.85	0.85				0.85	0.85	0.85				0.85	0.85	0.85				0.85	0.85	0.85			
PHF Volume:	0	96	0				0	64	72				0	0	35				0	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	96	0				0	64	72				0	0	35				0	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx	xxxxx	xxxx				6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx	xxxxx	xxxx				3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	99				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	962				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	962				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	0.04				xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	0.1				xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx	xxxx	8.9				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				*	*	A				*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						8.9						xxxxxx					
ApproachLOS:	*						*						A						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.428
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 26.0
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	10		15		193		65		39		106		40		361		8		110		484		34	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10		15		193		65		39		106		40		361		8		110		484		34	
Added Vol:	9		0		0		0		0		21		15		21		6		0		28		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	19		15		193		65		39		127		55		382		14		110		512		34	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	23		18		236		80		48		156		67		468		17		135		627		42	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	23		18		236		80		48		156		67		468		17		135		627		42	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	23		18		236		80		48		156		67		468		17		135		627		42	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.13		0.05		0.03		0.09		0.04		0.13		0.01		0.08		0.17		0.02	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.29		0.29		0.10		0.29		0.29		0.10		0.42		0.42		0.10		0.42		0.42	
Volume/Cap:	0.13		0.03		0.45		0.45		0.09		0.30		0.38		0.31		0.02		0.76		0.42		0.06	
Delay/Veh:	39.4		24.4		28.3		42.2		24.8		26.7		41.5		18.9		16.5		59.2		20.0		16.8	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	39.4		24.4		28.3		42.2		24.8		26.7		41.5		18.9		16.5		59.2		20.0		16.8	
LOS by Move:	D		C		C		D		C		C		D		B		B		E		B		B	
HCM2kAvgQ:	1		0		6		3		1		4		2		5		0		6		7		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.424
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 26.3
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	19		55		197		59		32		51		122		519		14		84		460		63	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	19		55		197		59		32		51		122		519		14		84		460		63	
Added Vol:	16		0		0		0		0		35		36		55		16		0		53		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	35		55		197		59		32		86		158		574		30		84		513		63	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	36		56		202		61		33		88		162		589		31		86		527		65	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	36		56		202		61		33		88		162		589		31		86		527		65	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	36		56		202		61		33		88		162		589		31		86		527		65	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.05		0.10		0.16		0.02		0.05		0.15		0.04	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.21		0.11		0.40		0.36		0.07		0.18		0.68		0.38		0.04		0.47		0.37		0.09	
Delay/Veh:	42.0		26.9		29.7		43.3		26.5		27.4		48.7		19.4		16.4		43.8		21.2		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	42.0		26.9		29.7		43.3		26.5		27.4		48.7		19.4		16.4		43.8		21.2		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		2		6		6		1		3		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: F[52.5]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	26	2	33	6		1	6				4	612	20			19	620	8		
Growth Adj:	1.00	1.00	1.00	1.00		1.00	1.00				1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	26	2	33	6		1	6				4	612	20			19	620	8		
Added Vol:	6	0	0	0		0	0				0	17	4			0	22	0		
PasserByVol:	0	0	0	0		0	0				0	0	0			0	0	0		
Initial Fut:	32	2	33	6		1	6				4	629	24			19	642	8		
User Adj:	1.00	1.00	1.00	1.00		1.00	1.00				1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.86	0.86	0.86	0.86		0.86	0.86				0.86	0.86	0.86			0.86	0.86	0.86		
PHF Volume:	37	2	38	7		1	7				5	731	28			22	746	9		
Reduct Vol:	0	0	0	0		0	0				0	0	0			0	0	0		
FinalVolume:	37	2	38	7		1	7				5	731	28			22	746	9		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1		6.5	6.2				4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3	3.5		4.0	3.3				2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1538	1539	731	1564		1557	746				755	xxxx	xxxxx			758	xxxx	xxxxx		
Potent Cap.:	95	117	425	92		114	417				865	xxxx	xxxxx			862	xxxx	xxxxx		
Move Cap.:	91	113	425	80		110	417				865	xxxx	xxxxx			862	xxxx	xxxxx		
Volume/Cap:	0.41	0.02	0.09	0.09		0.01	0.02				0.01	xxxx	xxxx			0.03	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx		xxxx	xxxxx				0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx		xxxx	xxxxx				9.2	xxxx	xxxxx			9.3	xxxx	xxxxx		
LOS by Move:	*	*	*	*		*	*				A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		150	xxxxx		xxxx		132	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		2.5	xxxxx		xxxxx		0.4	xxxxx		xxxxx	xxxxx	xxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		52.5	xxxxx		xxxxx		35.7	xxxxx		xxxxx	xxxxx	xxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		F	*		*		E	*		*	*	*			*	*	*		
ApproachDel:			52.5					35.7				xxxxxx					xxxxxx			
ApproachLOS:			F					E				*					*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[22.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	33	6	1	6	4	612	20	19	620	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	33	6	1	6	4	612	20	19	620	8												
Added Vol:	6	0	0	0	0	0	0	17	4	0	22	0												
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0												
Initial Fut:	32	0	35	0	0	13	0	639	25	19	642	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	37	0	41	0	0	15	0	742	29	22	746	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	37	0	41	0	0	15	0	742	29	22	746	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1544	1541	742	1567	1561	746	xxxx	xxxx	xxxxx	771	xxxx	xxxxx												
Potent Cap.:	95	116	419	91	113	417	xxxx	xxxx	xxxxx	853	xxxx	xxxxx												
Move Cap.:	89	113	419	81	110	417	xxxx	xxxx	xxxxx	853	xxxx	xxxxx												
Total Cap:	215	237	xxxxx	198	229	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	0.17	0.00	0.10	0.00	0.00	0.04	xxxx	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		288	xxxxx		xxxx		417	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		1.1	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx		22.0	xxxxx	xxxxx		14.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx									
Shared LOS:	*		C	*	*		B	*	*	*	*	*	*	*	*									
ApproachDel:	22.0			14.0			xxxxxx			xxxxxx														
ApproachLOS:	C			B			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: F[57.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30	0	20				7	2	11				10	693	54				39	590	8			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	30	0	20				7	2	11				10	693	54				39	590	8			
Added Vol:	9	0	0				0	0	0				0	46	9				0	44	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	39	0	20				7	2	11				10	739	63				39	634	8			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	40	0	20				7	2	11				10	750	64				40	643	8			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	40	0	20				7	2	11				10	750	64				40	643	8			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1503	1501	750				1535	1557	643				652	xxxx	xxxxx				814	xxxx	xxxxx			
Potent Cap.:	101	123	415				96	114	477				945	xxxx	xxxxx				822	xxxx	xxxxx			
Move Cap.:	93	116	415				87	107	477				945	xxxx	xxxxx				822	xxxx	xxxxx			
Volume/Cap:	0.43	0.00	0.05				0.08	0.02	0.02				0.01	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.2	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.9	xxxx	xxxxx				9.6	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		126	xxxxx			xxxx		164	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		2.2	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		57.1	xxxxx			xxxxx		30.0	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		D	*			*	*	*				*	*	*			
ApproachDel:	57.1						30.0						xxxxxx						xxxxxx					
ApproachLOS:	F						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2022) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[23.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		693		54		39		590		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		693		54		39		590		8	
Added Vol:	9		0		0		0		0		0		0		46		9		0		44		0	
PasserByVol:	0		0		0		-7		-2		9		-10		17		2		0		0		0	
Initial Fut:	39		0		20		0		0		20		0		756		65		39		634		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	40		0		20		0		0		20		0		767		66		40		643		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	40		0		20		0		0		20		0		767		66		40		643		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1504		1498		767		1533		1556		643		xxxx		xxxx		xxxxx		833		xxxx		xxxxx	
Potent Cap.:	101		124		405		96		114		477		xxxx		xxxx		xxxxx		808		xxxx		xxxxx	
Move Cap.:	93		118		405		88		108		477		xxxx		xxxx		xxxxx		808		xxxx		xxxxx	
Total Cap:	219		242		xxxxx		201		221		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.18		0.00		0.05		0.00		0.00		0.04		xxxx		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.2		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.7		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		259		xxxxx		xxxx		477		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.9		xxxxx		xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		23.0		xxxxx		xxxxx		12.9		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		B		*		*		*		*		*		*		*	
ApproachDel:	23.0						12.9						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

Opening Year (2023) Without Project

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	12.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	17	4	65	15	35	0	5	278	30	203	214	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	4	65	15	35	0	5	278	30	203	214	11
Added Vol:	0	0	3	0	0	0	0	12	0	2	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	4	68	15	35	0	5	290	30	205	224	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	19	5	78	17	40	0	6	331	34	234	256	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	5	78	17	40	0	6	331	34	234	256	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	5	78	17	40	0	6	331	34	234	256	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.82	0.18	1.00	0.31	0.69	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1391	327	1800	531	1238	1800	1700	1800	1800	1700	1716	84
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.04	0.03	0.03	0.00	0.00	0.18	0.02	0.14	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.11	0.11	0.11	0.11	0.11	0.00	0.02	0.45	0.45	0.34	0.78	0.78
Volume/Cap:	0.13	0.13	0.41	0.30	0.30	0.00	0.19	0.41	0.04	0.41	0.19	0.19
Delay/Veh:	24.6	24.6	26.4	25.7	25.7	0.0	32.2	11.3	9.1	15.6	1.8	1.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	24.6	26.4	25.7	25.7	0.0	32.2	11.3	9.1	15.6	1.8	1.8
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.461
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.1
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	26	14	49	17	10	3	4	264	29	241	289	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	14	49	17	10	3	4	264	29	241	289	22
Added Vol:	0	0	5	0	0	0	0	32	0	5	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	14	54	17	10	3	4	296	29	246	323	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	32	17	66	21	12	4	5	362	35	301	395	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	17	66	21	12	4	5	362	35	301	395	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	17	66	21	12	4	5	362	35	301	395	27
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.66	0.34	1.00	0.64	0.36	1.00	1.00	1.00	1.00	1.00	0.94	0.06
Final Sat.:	1127	607	1800	1093	643	1800	1700	1800	1800	1700	1685	115
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.04	0.02	0.02	0.00	0.00	0.20	0.02	0.18	0.23	0.23
Crit Moves:			****					****		****		
Green/Cycle:	0.08	0.08	0.08	0.08	0.08	0.08	0.01	0.44	0.44	0.38	0.81	0.81
Volume/Cap:	0.35	0.35	0.46	0.24	0.24	0.03	0.29	0.46	0.05	0.46	0.29	0.29
Delay/Veh:	27.7	27.7	28.7	26.8	26.8	25.5	38.8	12.4	9.7	14.4	1.5	1.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	27.7	28.7	26.8	26.8	25.5	38.8	12.4	9.7	14.4	1.5	1.5
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.9]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	44	14	3	18	18	309	39	26	428	32								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	44	14	3	18	18	309	39	26	428	32								
Added Vol:	0	0	0	0	0	0	0	15	0	0	12	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	41	5	44	14	3	18	18	324	39	26	440	32								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	50	6	54	17	4	22	22	398	48	32	540	39								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	50	6	54	17	4	22	22	398	48	32	540	39								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	778	1086	199	851	1094	270	580	xxxx	xxxxx	446	xxxx	xxxxx								
Potent Cap.:	290	218	815	257	216	734	1004	xxxx	xxxxx	1125	xxxx	xxxxx								
Move Cap.:	267	207	815	226	205	734	1004	xxxx	xxxxx	1125	xxxx	xxxxx								
Volume/Cap:	0.19	0.03	0.07	0.08	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	22.3	xxxx	xxxxx	8.7	xxxx	xxxxx	8.3	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	388	xxxxx	xxxx	xxxx	536	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	17.9	xxxxx	xxxxx	xxxx	12.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*								
ApproachDel:	17.9			16.1			xxxxxx			xxxxxx										
ApproachLOS:	C			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.3]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	44	14	3	18	18	309	39		26	428	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	44	14	3	18	18	309	39		26	428	32	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	-41	-5	41	-15	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	85	-1	0	18	18	324	39		26	481	32	
User Adj:	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.00	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	104	0	0	22	22	398	48		32	591	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	104	0	0	22	22	398	48		32	591	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	801	1136	199	898	1145	295	630	xxxx	xxxxx		446	xxxx	xxxxx	
Potent Cap.:	279	204	815	238	201	707	962	xxxx	xxxxx		1125	xxxx	xxxxx	
Move Cap.:	260	193	815	199	191	707	962	xxxx	xxxxx		1125	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.00	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	815	xxxxx	xxxx	xxxx	707	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.3	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			10.3			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.4 Worst Case Level Of Service: E[40.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	91	27	82	27	39	30	31	263	36	57	471	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	27	82	27	39	30	31	263	36	57	471	92
Added Vol:	0	0	0	0	0	0	0	36	0	0	39	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	27	82	27	39	30	31	299	36	57	510	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	96	29	87	29	41	32	33	316	38	60	539	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	96	29	87	29	41	32	33	316	38	60	539	97
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	792	1137	158	897	1078	269	636	xxxx	xxxxx	354	xxxx	xxxxx
Potent Cap.:	283	203	866	238	220	735	957	xxxx	xxxxx	1216	xxxx	xxxxx
Move Cap.:	215	187	866	178	202	735	957	xxxx	xxxxx	1216	xxxx	xxxxx
Volume/Cap:	0.45	0.15	0.10	0.16	0.20	0.04	0.03	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	29.1	xxxx	xxxxx	8.9	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	302	xxxxx	xxxx	xxxx	295	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	4.9	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	40.6	xxxxx	xxxxx	xxxx	21.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	C	*	*	*	*	*	*
ApproachDel:	40.6			23.4			xxxxxx			xxxxxx		
ApproachLOS:	E			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		57	471	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82	27	39	30	31	263	36		57	471	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0		0	91	0	
Initial Fut:	0	0	173	0	0	30	31	299	36		57	601	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	183	0	0	32	33	316	38		60	635	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	183	0	0	32	33	316	38		60	635	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	819	1233	158	978	1174	317	732	xxxx	xxxxx		354	xxxx	xxxxx	
Potent Cap.:	271	178	866	208	193	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Move Cap.:	242	163	866	153	177	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	866	xxxxx	xxxx	xxxx	684	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			10.5			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.398
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	68	116	128	117	108	92	50	275	47	174	399	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	116	128	117	108	92	50	275	47	174	399	37
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	124	131	119	114	102	62	278	47	176	401	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	140	148	135	129	115	70	315	53	199	454	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	140	148	135	129	115	70	315	53	199	454	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	140	148	135	129	115	70	315	53	199	454	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3288	312
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.08	0.08	0.04	0.06	0.04	0.09	0.03	0.12	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.11	0.33	0.33	0.12	0.32	0.32	0.17	0.37	0.37
Volume/Cap:	0.43	0.12	0.26	0.70	0.11	0.20	0.35	0.27	0.09	0.70	0.37	0.37
Delay/Veh:	43.5	24.1	25.4	53.7	23.5	24.3	41.5	25.5	23.9	46.9	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.5	24.1	25.4	53.7	23.5	24.3	41.5	25.5	23.9	46.9	23.3	23.3
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	3	6	1	3	2	4	1	8	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.313
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	22.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0 2	0	1		1 0 2	0	1		1 0 2	0	1		1 0 1	1	0	
Volume Module:																
Base Vol:	68	116	128		117	108	92		50	275	47		174	399	37	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	116	128		117	108	92		50	275	47		174	399	37	
Added Vol:	0	8	3		2	6	10		12	3	0		2	2	1	
PasserByVol:	0	5	0		11	5	0		39	-11	-2		0	0	0	
Initial Fut:	68	129	131		130	119	102		101	267	45		176	401	38	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	77	146	148		147	135	115		114	302	51		199	454	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	77	146	148		147	135	115		114	302	51		199	454	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	77	146	148		147	135	115		114	302	51		199	454	43	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.83	0.17	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3288	312	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.04	0.08		0.09	0.04	0.06		0.07	0.08	0.03		0.12	0.14	0.14	
Crit Moves:			****							****			****			
Green/Cycle:	0.38	0.38	0.38		0.38	0.38	0.38		0.13	0.38	0.38		0.15	0.40	0.40	
Volume/Cap:	0.12	0.11	0.22		0.23	0.10	0.17		0.52	0.22	0.08		0.77	0.34	0.34	
Delay/Veh:	17.4	17.3	18.2		18.3	17.2	17.8		36.8	18.1	17.1		47.3	17.9	17.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.4	17.3	18.2		18.3	17.2	17.8		36.8	18.1	17.1		47.3	17.9	17.9	
LOS by Move:	B	B	B		B	B	B		D	B	B		D	B	B	
HCM2kAvgQ:	1	1	3		3	1	2		4	3	1		7	5	5	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.440
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 29.7
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2 0	1		1 0	2 0	1		1 0	2 0	1		1 0	1 1	0	
Volume Module:																
Base Vol:	117	171	225		130	98	110		87	325	37		125	430	56	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	117	171	225		130	98	110		87	325	37		125	430	56	
Added Vol:	0	21	5		3	23	34		32	5	0		5	5	3	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	117	192	230		133	121	144		119	330	37		130	435	59	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	126	206	247		143	130	154		128	354	40		139	467	63	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	126	206	247		143	130	154		128	354	40		139	467	63	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	126	206	247		143	130	154		128	354	40		139	467	63	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.76	0.24	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3170	430	
Capacity Analysis Module:																
Vol/Sat:	0.07	0.06	0.14		0.08	0.04	0.09		0.08	0.10	0.02		0.08	0.15	0.15	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.11	0.35	0.35		0.11	0.35	0.35		0.11	0.35	0.35		0.11	0.35	0.35	
Volume/Cap:	0.66	0.16	0.39		0.77	0.10	0.25		0.67	0.28	0.06		0.75	0.43	0.43	
Delay/Veh:	47.7	20.8	23.1		57.9	20.5	21.8		48.5	21.8	20.0		55.9	23.4	23.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	47.7	20.8	23.1		57.9	20.5	21.8		48.5	21.8	20.0		55.9	23.4	23.4	
LOS by Move:	D	C	C		E	C	C		D	C	C		E	C	C	
HCM2kAvgQ:	5	2	5		6	1	3		5	4	1		6	6	6	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.454
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	23.1
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	117	171	225	130	98	110	87	325	37	125	430	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	171	225	130	98	110	87	325	37	125	430	56
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	27	0	20	44	0	86	-20	-2	0	0	0
Initial Fut:	117	219	230	153	165	144	205	310	35	130	435	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	126	235	247	164	177	154	220	333	38	139	467	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	235	247	164	177	154	220	333	38	139	467	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	235	247	164	177	154	220	333	38	139	467	63
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3170	430
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.14	0.10	0.05	0.09	0.13	0.09	0.02	0.08	0.15	0.15
Crit Moves:			****				****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.42	0.42	0.13	0.34	0.34
Volume/Cap:	0.21	0.18	0.39	0.27	0.14	0.24	0.61	0.22	0.05	0.62	0.43	0.43
Delay/Veh:	20.4	20.1	22.0	20.9	19.7	20.6	35.3	16.6	15.3	42.1	22.9	22.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	20.1	22.0	20.9	19.7	20.6	35.3	16.6	15.3	42.1	22.9	22.9
LOS by Move:	C	C	C	C	B	C	D	B	B	D	C	C
HCM2kAvgQ:	3	2	5	3	2	3	7	3	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.381
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.9
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1 0	1		1 0	1 0	1		0 1	0 0	1		0 0	1! 0	0	
Volume Module:																
Base Vol:	67	299	150		22	232	76		34	48	28		89	94	27	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	67	299	150		22	232	76		34	48	28		89	94	27	
Added Vol:	0	11	0		0	9	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	67	310	150		22	241	76		34	48	28		89	94	27	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	82	378	183		27	294	93		41	59	34		109	115	33	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	82	378	183		27	294	93		41	59	34		109	115	33	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	82	378	183		27	294	93		41	59	34		109	115	33	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.43	0.57	1.00		0.44	0.44	0.12	
Final Sat.:	1700	1800	1800		1700	1800	1800		729	1029	1800		744	786	226	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.21	0.10		0.02	0.16	0.05		0.06	0.06	0.02		0.15	0.15	0.15	
Crit Moves:		****												****		
Green/Cycle:	0.55	0.55	0.55		0.55	0.55	0.55		0.38	0.38	0.38		0.38	0.38	0.38	
Volume/Cap:	0.09	0.38	0.18		0.03	0.30	0.09		0.15	0.15	0.05		0.38	0.38	0.38	
Delay/Veh:	6.4	7.9	6.8		6.2	7.4	6.4		12.2	12.2	11.7		13.8	13.8	13.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	6.4	7.9	6.8		6.2	7.4	6.4		12.2	12.2	11.7		13.8	13.8	13.8	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	4	2		0	3	1		1	1	0		4	4	4	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle: OPTIMIZED		Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 0 1!	0	0
Volume Module:												
Base Vol:	58	452	233	18	108	103	31	39	20	52	54	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	452	233	18	108	103	31	39	20	52	54	37
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	478	233	18	135	103	31	39	20	52	54	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	540	263	20	153	116	35	44	23	59	61	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	540	263	20	153	116	35	44	23	59	61	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	540	263	20	153	116	35	44	23	59	61	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.46	0.54	1.00	0.38	0.37	0.25
Final Sat.:	1700	1800	1800	1700	1800	1800	777	977	1800	641	665	456
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.15	0.01	0.08	0.06	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.07	0.51	0.25	0.02	0.15	0.11	0.13	0.13	0.04	0.26	0.26	0.26
Delay/Veh:	5.4	7.9	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.9	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[20.0]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	696	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	696	1	
Added Vol:	0	0	0	4	0	3	4	12	0		0	17	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	486	2		10	713	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	594	2		12	872	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	594	2		12	872	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1506	1508	594	1506	1503	872	880	xxxx	xxxxx		597	xxxx	xxxxx	
Potent Cap.:	100	122	508	101	123	353	777	xxxx	xxxxx		990	xxxx	xxxxx	
Move Cap.:	98	120	508	98	120	353	777	xxxx	xxxxx		990	xxxx	xxxxx	
Total Cap:	219	238	xxxxx	220	239	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	353	xxxxx	xxxx	251	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.5	xxxxx	xxxxx	20.0	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.5			20.0			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	10	0	8	7	0	2	3	735	3	14	564	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	0	8	7	0	2	3	735	3	14	564	4
Added Vol:	0	0	0	8	0	6	6	40	0	0	38	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	0	8	15	0	8	9	775	3	14	602	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	11	0	9	16	0	9	10	827	3	15	643	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	0	9	16	0	9	10	827	3	15	643	13
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1530	1532	827	1525	1522	643	655	xxxx	xxxxx	830	xxxx	xxxxx
Potent Cap.:	97	118	374	98	120	477	941	xxxx	xxxxx	810	xxxx	xxxxx
Move Cap.:	93	115	374	93	116	477	941	xxxx	xxxxx	810	xxxx	xxxxx
Total Cap:	217	236	xxxxx	214	235	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.05	0.00	0.02	0.07	0.00	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	267	xxxxx	xxxx	264	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.5	xxxxx	xxxxx	20.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	19.5			20.0			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: D[25.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		28		16		4		30		20		395		26		20		590		18	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10		2		28		16		4		30		20		395		26		20		590		18	
Added Vol:	3		0		0		0		0		0		0		14		2		0		19		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	13		2		28		16		4		30		20		409		28		20		609		18	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89	
PHF Volume:	15		2		32		18		5		34		23		461		32		23		686		20	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	15		2		32		18		5		34		23		461		32		23		686		20	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1267		1258		461		1280		1279		696		707		xxxx		xxxxx		493		xxxx		xxxxx	
Potent Cap.:	147		172		605		144		167		445		901		xxxx		xxxxx		1081		xxxx		xxxxx	
Move Cap.:	128		165		605		130		160		445		901		xxxx		xxxxx		1081		xxxx		xxxxx	
Volume/Cap:	0.11		0.01		0.05		0.14		0.03		0.08		0.03		xxxx		xxxx		0.02		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.1		xxxx		xxxxx		8.4		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		269		xxxxx		xxxx		232		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.6		xxxxx		xxxxx		0.9		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		21.3		xxxxx		xxxxx		25.4		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		D		*		*		*		*		*		*		*	
ApproachDel:	21.3						25.4						xxxxxx						xxxxxx					
ApproachLOS:	C						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.441
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	19	19	19				19	19	19				10	32	32				10	32	32			
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10	2	28				16	4	30				20	395	26				20	590	18			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	10	2	28				16	4	30				20	395	26				20	590	18			
Added Vol:	3	0	0				0	0	0				0	14	2				0	19	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	13	2	28				16	4	30				20	409	28				20	609	18			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89			
PHF Volume:	15	2	32				18	5	34				23	461	32				23	686	20			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	15	2	32				18	5	34				23	461	32				23	686	20			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	15	2	32				18	5	34				23	461	32				23	686	20			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.07	0.93				1.00	0.12	0.88				1.00	1.00	1.00				1.00	1.00	1.00			
Final Sat.:	1700	120	1680				1700	212	1588				1700	1800	1800				1700	1800	1800			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.02	0.02				0.01	0.02	0.02				0.01	0.26	0.02				0.01	0.38	0.01			
Crit Moves:								****						****							****			
Green/Cycle:	0.18	0.18	0.18				0.18	0.18	0.18				0.10	0.58	0.58				0.18	0.67	0.67			
Volume/Cap:	0.05	0.10	0.10				0.06	0.12	0.12				0.14	0.44	0.03				0.07	0.57	0.02			
Delay/Veh:	35.6	36.0	36.0				35.7	36.1	36.1				43.9	12.7	9.4				35.8	10.1	5.9			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	35.6	36.0	36.0				35.7	36.1	36.1				43.9	12.7	9.4				35.8	10.1	5.9			
LOS by Move:	D	D	D				D	D	D				D	B	A				D	B	A			
HCM2kAvgQ:	0	1	1				1	1	1				1	8	0				1	12	0			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: E[44.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	24	0	26				25	0	25				46	619	16				24	551	24			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	24	0	26				25	0	25				46	619	16				24	551	24			
Added Vol:	5	0	0				0	0	0				0	43	5				0	41	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	29	0	26				25	0	25				46	662	21				24	592	24			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	31	0	27				26	0	26				48	697	22				25	623	25			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	31	0	27				26	0	26				48	697	22				25	623	25			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1493	1492	697				1504	1502	636				648	xxxx	xxxxx				719	xxxx	xxxxx			
Potent Cap.:	103	125	445				101	123	482				947	xxxx	xxxxx				892	xxxx	xxxxx			
Move Cap.:	91	115	445				89	113	482				947	xxxx	xxxxx				892	xxxx	xxxxx			
Volume/Cap:	0.33	0.00	0.06				0.30	0.00	0.05				0.05	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.2	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		146	xxxxx			xxxx		150	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.7	xxxxx			xxxxx		1.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		44.9	xxxxx			xxxxx		41.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		E	*			*	*	*				*	*	*			
ApproachDel:	44.9						41.4						xxxxxx						xxxxxx					
ApproachLOS:	E						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	24	0	26	25	0	25	46	619	16	24	551	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	0	26	25	0	25	46	619	16	24	551	24
Added Vol:	5	0	0	0	0	0	0	43	5	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	0	26	25	0	25	46	662	21	24	592	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	31	0	27	26	0	26	48	697	22	25	623	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	0	27	26	0	26	48	697	22	25	623	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	0	27	26	0	26	48	697	22	25	623	25
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	0	1800	1700	0	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.02	0.02	0.00	0.01	0.03	0.39	0.01	0.01	0.35	0.01
Crit Moves:	****							****		****		
Green/Cycle:	0.22	0.00	0.22	0.22	0.00	0.22	0.17	0.59	0.59	0.12	0.54	0.54
Volume/Cap:	0.08	0.00	0.07	0.07	0.00	0.07	0.17	0.66	0.02	0.13	0.64	0.03
Delay/Veh:	26.2	0.0	26.1	26.1	0.0	26.1	30.6	13.3	7.3	33.9	15.4	9.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.2	0.0	26.1	26.1	0.0	26.1	30.6	13.3	7.3	33.9	15.4	9.2
LOS by Move:	C	A	C	C	A	C	C	B	A	C	B	A
HCM2kAvgQ:	1	0	1	1	0	1	1	13	0	1	12	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.415
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10	28	28				10	28	28				10	40	40				10	40	40			
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	11	16	193				64	39	109				41	362			8		110	491			33	
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	11	16	193				64	39	109				41	362			8		110	491			33	
Added Vol:	3	0	0				0	0	4				3	9			2		0	11			0	
PasserByVol:	0	0	0				0	0	0				0	0			0		0	0			0	
Initial Fut:	14	16	193				64	39	113				44	371			10		110	502			33	
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82			0.82		0.82	0.82			0.82	
PHF Volume:	17	20	236				78	48	138				54	454			12		135	615			40	
Reduct Vol:	0	0	0				0	0	0				0	0			0		0	0			0	
Reduced Vol:	17	20	236				78	48	138				54	454			12		135	615			40	
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
FinalVolume:	17	20	236				78	48	138				54	454			12		135	615			40	
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800			1800		1800	1800			1800	
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00			1.00		0.94	1.00			1.00	
Lanes:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	2.00			1.00		1.00	2.00			1.00	
Final Sat.:	1700	1800	1800				1700	1800	1800				1700	3600			1800		1700	3600			1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.13				0.05	0.03	0.08				0.03	0.13			0.01		0.08	0.17			0.02	
Crit Moves:			****				****							****					****					
Green/Cycle:	0.10	0.28	0.28				0.10	0.28	0.28				0.11	0.38			0.38		0.17	0.44			0.44	
Volume/Cap:	0.10	0.04	0.47				0.47	0.10	0.28				0.29	0.33			0.02		0.47	0.39			0.05	
Delay/Veh:	43.3	27.7	32.2				47.0	28.3	30.1				43.8	23.2			20.3		40.7	20.1			16.9	
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	43.3	27.7	32.2				47.0	28.3	30.1				43.8	23.2			20.3		40.7	20.1			16.9	
LOS by Move:	D		C		C		D		C		C		D		C		C		D		C		B	
HCM2kAvgQ:	1		0		7		3		1		4		2		5		0		5		7		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 25.7
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	19	57	196	59	32	51	128	522	14	86	460	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	57	196	59	32	51	128	522	14	86	460	65
Added Vol:	7	0	0	0	0	8	9	27	7	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	57	196	59	32	59	137	549	21	86	486	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	27	59	201	61	33	61	141	564	22	88	499	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	59	201	61	33	61	141	564	22	88	499	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	59	201	61	33	61	141	564	22	88	499	67
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.03	0.08	0.16	0.01	0.05	0.14	0.04
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.16	0.12	0.40	0.36	0.07	0.12	0.59	0.36	0.03	0.48	0.35	0.09
Delay/Veh:	41.6	26.9	29.7	43.3	26.5	26.9	44.2	19.3	16.3	43.9	21.0	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.6	26.9	29.7	43.3	26.5	26.9	44.2	19.3	16.3	43.9	21.0	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	1	5	6	0	3	5	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: E[42.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	34	6	1	6	4	612	20	19	620	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	34	6	1	6	4	612	20	19	620	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	26	2	34	6	1	6	4	621	20	19	631	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	30	2	39	7	1	7	5	721	23	22	733	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	30	2	39	7	1	7	5	721	23	22	733	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1516	1517	721	1540	1531	733	742	xxxx	xxxxx	744	xxxx	xxxxx												
Potent Cap.:	99	120	431	95	118	424	874	xxxx	xxxxx	872	xxxx	xxxxx												
Move Cap.:	94	117	431	83	114	424	874	xxxx	xxxxx	872	xxxx	xxxxx												
Volume/Cap:	0.32	0.02	0.09	0.08	0.01	0.02	0.01	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	167	xxxxx	xxxx	137	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	2.0	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	42.1	xxxxx	xxxxx	34.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	E	*	*	D	*	*	*	*	*	*	*												
ApproachDel:	42.1			34.6			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[20.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	34		6	1	6				4	612	20		19	620	8							
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00				1.00	1.00	1.00		1.00	1.00	1.00							
Initial Bse:	26	2	34		6	1	6				4	612	20		19	620	8							
Added Vol:	0	0	0		0	0	0				0	9	0		0	11	0							
PasserByVol:	0	-2	2		-6	-1	7				-4	10	1		0	0	0							
Initial Fut:	26	0	36		0	0	13				0	631	21		19	631	8							
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00				1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.86	0.86	0.86		0.86	0.86	0.86				0.86	0.86	0.86		0.86	0.86	0.86							
PHF Volume:	30	0	42		0	0	15				0	733	24		22	733	9							
Reduct Vol:	0	0	0		0	0	0				0	0	0		0	0	0							
FinalVolume:	30	0	42		0	0	15				0	733	24		22	733	9							
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2				xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3				xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																								
Cnflict Vol:	1522	1519	733		1543	1534	733				xxxx	xxxx	xxxxx		757	xxxx	xxxxx							
Potent Cap.:	98	120	424		95	117	424				xxxx	xxxx	xxxxx		863	xxxx	xxxxx							
Move Cap.:	93	117	424		84	114	424				xxxx	xxxx	xxxxx		863	xxxx	xxxxx							
Total Cap:	219	241	xxxxx		202	234	xxxxx				xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
Volume/Cap:	0.14	0.00	0.10		0.00	0.00	0.04				xxxx	xxxx	xxxx		0.03	xxxx	xxxx							
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx		9.3	xxxx	xxxxx							
LOS by Move:	*	*	*		*	*	*				*	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		304	xxxxx			xxxx		424	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.9	xxxxx			xxxxx		0.1	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		20.4	xxxxx			xxxxx		13.8	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		B	*			*	*	*				*	*	*			
ApproachDel:	20.4						13.8						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[43.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	30	0	20	7	2	11	10	693	54	39	590	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	0	20	7	2	11	10	693	54	39	590	8
Added Vol:	0	0	0	0	0	0	0	27	0	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	20	7	2	11	10	720	54	39	616	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	30	0	20	7	2	11	10	731	55	40	625	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	30	0	20	7	2	11	10	731	55	40	625	8
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1466	1463	731	1493	1510	625	633	xxxx	xxxxx	785	xxxx	xxxxx
Potent Cap.:	107	130	425	103	122	488	959	xxxx	xxxxx	842	xxxx	xxxxx
Move Cap.:	99	122	425	93	115	488	959	xxxx	xxxxx	842	xxxx	xxxxx
Volume/Cap:	0.31	0.00	0.05	0.08	0.02	0.02	0.01	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	143	xxxxx	xxxx	174	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.5	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	43.6	xxxxx	xxxxx	28.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	D	*	*	*	*	*	*	*
ApproachDel:	43.6			28.4			xxxxxx			xxxxxx		
ApproachLOS:	E			D			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		693		54		39		590		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		693		54		39		590		8	
Added Vol:	0		0		0		0		0		0		0		27		0		0		26		0	
PasserByVol:	0		0		0		-7		-2		9		-10		17		2		0		0		0	
Initial Fut:	30		0		20		0		0		20		0		737		56		39		616		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	30		0		20		0		0		20		0		748		57		40		625		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	30		0		20		0		0		20		0		748		57		40		625		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1466		1460		748		1491		1509		625		xxxx		xxxx		xxxxx		805		xxxx		xxxxx	
Potent Cap.:	107		130		416		103		122		488		xxxx		xxxx		xxxxx		828		xxxx		xxxxx	
Move Cap.:	99		124		416		94		116		488		xxxx		xxxx		xxxxx		828		xxxx		xxxxx	
Total Cap:	226		248		xxxxx		209		229		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.13		0.00		0.05		0.00		0.00		0.04		xxxx		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.2		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.6		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		277		xxxxx		xxxx		488		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.7		xxxxx		xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		20.9		xxxxx		xxxxx		12.7		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		B		*		*		*		*		*		*		*	
ApproachDel:	20.9						12.7						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

Opening Year (2023) With Project

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	12.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	17	4	65	15	35	0	5	278	30	203	214	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	4	65	15	35	0	5	278	30	203	214	11
Added Vol:	0	0	10	0	0	0	0	12	0	8	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	4	75	15	35	0	5	290	30	211	224	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	19	5	86	17	40	0	6	331	34	241	256	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	5	86	17	40	0	6	331	34	241	256	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	5	86	17	40	0	6	331	34	241	256	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.82	0.18	1.00	0.31	0.69	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1391	327	1800	531	1238	1800	1700	1800	1800	1700	1716	84
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.05	0.03	0.03	0.00	0.00	0.18	0.02	0.14	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.11	0.11	0.11	0.11	0.11	0.00	0.02	0.44	0.44	0.34	0.77	0.77
Volume/Cap:	0.12	0.12	0.42	0.28	0.28	0.00	0.19	0.42	0.04	0.42	0.19	0.19
Delay/Veh:	24.1	24.1	26.0	25.1	25.1	0.0	32.3	11.7	9.5	15.6	2.0	2.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.1	24.1	26.0	25.1	25.1	0.0	32.3	11.7	9.5	15.6	2.0	2.0
LOS by Move:	C	C	C	C	C	A	C	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	4	0	4	1	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.477
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	26	14	49				17	10	3				4	264	29				241	289	22			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	26	14	49				17	10	3				4	264	29				241	289	22			
Added Vol:	0	0	15				0	0	0				0	32	0				15	34	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	26	14	64				17	10	3				4	296	29				256	323	22			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	32	17	78				21	12	4				5	362	35				313	395	27			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	32	17	78				21	12	4				5	362	35				313	395	27			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	32	17	78				21	12	4				5	362	35				313	395	27			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.66	0.34	1.00				0.64	0.36	1.00				1.00	1.00	1.00				1.00	0.94	0.06			
Final Sat.:	1127	607	1800				1093	643	1800				1700	1800	1800				1700	1685	115			
Capacity Analysis Module:																								
Vol/Sat:	0.03	0.03	0.04				0.02	0.02	0.00				0.00	0.20	0.02				0.18	0.23	0.23			
Crit Moves:			****											****					****					
Green/Cycle:	0.09	0.09	0.09				0.09	0.09	0.09				0.01	0.42	0.42				0.39	0.80	0.80			
Volume/Cap:	0.31	0.31	0.48				0.21	0.21	0.02				0.29	0.48	0.05				0.48	0.29	0.29			
Delay/Veh:	26.6	26.6	28.1				25.9	25.9	24.9				39.1	13.0	10.2				14.4	1.7	1.7			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	26.6	26.6	28.1				25.9	25.9	24.9				39.1	13.0	10.2				14.4	1.7	1.7			
LOS by Move:	C	C	C				C	C	C				D	B	B				B	A	A			
HCM2kAvgQ:	1	1	2				1	1	0				0	5	0				5	2	2			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[18.6]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0 0 1	0	1	0 2	0	1			1	0 2	0	1		
Volume Module:																		
Base Vol:	41	5	44	14	3	18	18	309	39	26	428	32						
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	41	5	44	14	3	18	18	309	39	26	428	32						
Added Vol:	0	0	0	7	0	0	0	30	0	0	23	6						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	41	5	44	21	3	18	18	339	39	26	451	38						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81						
PHF Volume:	50	6	54	26	4	22	22	416	48	32	554	47						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	50	6	54	26	4	22	22	416	48	32	554	47						
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	803	1125	208	873	1126	277	601	xxxx	xxxxx	464	xxxx	xxxxx						
Potent Cap.:	278	207	804	247	206	726	986	xxxx	xxxxx	1108	xxxx	xxxxx						
Move Cap.:	255	196	804	217	196	726	986	xxxx	xxxxx	1108	xxxx	xxxxx						
Volume/Cap:	0.20	0.03	0.07	0.12	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx	23.8	xxxx	xxxxx	8.7	xxxx	xxxxx	8.3	xxxx	xxxxx						
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*						
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT						
Shared Cap.:	xxxx	374	xxxxx	xxxx	xxxx	524	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	18.6	xxxxx	xxxxx	xxxx	12.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*						
ApproachDel:	18.6			18.0			xxxxxx			xxxxxx								
ApproachLOS:	C			C			*			*								

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[13.9]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	44	14	3	18	18	309	39	26	428	32								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	44	14	3	18	18	309	39	26	428	32								
Added Vol:	0	0	0	7	0	0	0	30	0	0	23	6								
PasserByVol:	-41	-5	41	-15	-3	0	0	0	0	0	41	0								
Initial Fut:	0	0	85	6	0	18	18	339	39	26	492	38								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	0	0	104	7	0	22	22	416	48	32	604	47								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	104	7	0	22	22	416	48	32	604	47								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	827	1175	208	921	1177	302	651	xxxx	xxxxx	464	xxxx	xxxxx								
Potent Cap.:	267	193	804	229	193	700	945	xxxx	xxxxx	1108	xxxx	xxxxx								
Move Cap.:	249	183	804	191	183	700	945	xxxx	xxxxx	1108	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.13	0.04	0.00	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	24.6	xxxx	xxxxx	8.9	xxxx	xxxxx	8.3	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		804	xxxxx		xxxx	xxxx		700		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.4	xxxxx		xxxxx	xxxx		0.1		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		10.1	xxxxx		xxxxx	xxxx		10.3		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*	*		B		*	*	*			*	*	*		
ApproachDel:	10.1			13.9			xxxxxx			xxxxxx										
ApproachLOS:	B			B			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 9.4 Worst Case Level Of Service: E[47.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	91	27	82	27	39	30	31	263	36	57	471	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	27	82	27	39	30	31	263	36	57	471	92
Added Vol:	0	0	0	11	0	0	0	58	0	0	60	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	27	82	38	39	30	31	321	36	57	531	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	96	29	87	40	41	32	33	339	38	60	561	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	96	29	87	40	41	32	33	339	38	60	561	109
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	826	1194	170	930	1124	280	670	xxxx	xxxxx	377	xxxx	xxxxx
Potent Cap.:	268	188	851	225	207	723	930	xxxx	xxxxx	1193	xxxx	xxxxx
Move Cap.:	200	172	851	165	190	723	930	xxxx	xxxxx	1193	xxxx	xxxxx
Volume/Cap:	0.48	0.17	0.10	0.24	0.22	0.04	0.04	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.9	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	33.6	xxxx	xxxxx	9.0	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	283	xxxxx	xxxx	xxxx	279	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	5.5	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	47.6	xxxxx	xxxxx	xxxx	22.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	C	*	*	*	*	*	*
ApproachDel:	47.6			26.4			xxxxxx			xxxxxx		
ApproachLOS:	E			D			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[16.4]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1				1 0 2 0 1			
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		57	471	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82	27	39	30	31	263	36		57	471	92	
Added Vol:	0	0	0	11	0	0	0	58	0		0	60	11	
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0		0	91	0	
Initial Fut:	0	0	173	11	0	30	31	321	36		57	622	103	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	183	12	0	32	33	339	38		60	657	109	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	183	12	0	32	33	339	38		60	657	109	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	853	1291	170	1012	1220	328	766	xxxx	xxxxx		377	xxxx	xxxxx	
Potent Cap.:	256	165	851	196	182	673	857	xxxx	xxxxx		1193	xxxx	xxxxx	
Move Cap.:	228	151	851	144	166	673	857	xxxx	xxxxx		1193	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.08	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	32.2	xxxx	xxxxx	9.4	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	851	xxxxx	xxxx	xxxx	673	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.4	xxxxx	xxxxx	xxxx	10.6	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.4			16.4			xxxxxx				xxxxxx			
ApproachLOS:	B			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	32.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	68	116	128	117	108	92	50	275	47	174	399	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	116	128	117	108	92	50	275	47	174	399	37
Added Vol:	0	8	32	17	6	10	12	25	0	25	19	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	124	160	134	114	102	62	300	47	199	418	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	140	181	152	129	115	70	339	53	225	473	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	140	181	152	129	115	70	339	53	225	473	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	140	181	152	129	115	70	339	53	225	473	57
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3215	385
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.10	0.09	0.04	0.06	0.04	0.09	0.03	0.13	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.11	0.33	0.33	0.12	0.32	0.32	0.17	0.37	0.37
Volume/Cap:	0.43	0.12	0.31	0.79	0.11	0.20	0.35	0.29	0.09	0.79	0.40	0.40
Delay/Veh:	43.5	24.1	26.0	62.9	23.5	24.4	41.5	25.7	23.9	53.9	23.6	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.5	24.1	26.0	62.9	23.5	24.4	41.5	25.7	23.9	53.9	23.6	23.6
LOS by Move:	D	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	4	7	1	3	2	4	1	9	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.355
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	22.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	68	116	128	117	108	92	50	275	47	174	399	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	116	128	117	108	92	50	275	47	174	399	37
Added Vol:	0	8	32	17	6	10	12	25	0	25	19	13
PasserByVol:	0	5	0	11	5	0	39	-11	-2	0	0	0
Initial Fut:	68	129	160	145	119	102	101	289	45	199	418	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	146	181	164	135	115	114	327	51	225	473	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	146	181	164	135	115	114	327	51	225	473	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	146	181	164	135	115	114	327	51	225	473	57
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3215	385
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.10	0.10	0.04	0.06	0.07	0.09	0.03	0.13	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.14	0.36	0.36	0.20	0.42	0.42
Volume/Cap:	0.13	0.11	0.28	0.27	0.11	0.18	0.50	0.26	0.08	0.66	0.35	0.35
Delay/Veh:	19.7	19.5	21.0	20.9	19.5	20.1	37.7	20.7	19.3	38.0	17.9	17.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.7	19.5	21.0	20.9	19.5	20.1	37.7	20.7	19.3	38.0	17.9	17.9
LOS by Move:	B	B	C	C	B	C	D	C	B	D	B	B
HCM2kAvgQ:	2	1	4	3	1	2	4	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.520
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 32.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		32		32		10		31		31		10		32		32		10		31		31	
Lanes:	1	0	2	0	1		1	0	2	0	1		1	0	2	0	1		1	0	1	1	0	
Volume Module:																								
Base Vol:	117		171		225		130		98		110		87		325		37		125		430		56	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	117		171		225		130		98		110		87		325		37		125		430		56	
Added Vol:	0		21		47		24		23		34		32		37		0		48		37		25	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	117		192		272		154		121		144		119		362		37		173		467		81	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.93		0.93		0.93		0.93		0.93		0.93		0.93		0.93		0.93		0.93		0.93		0.93	
PHF Volume:	126		206		292		165		130		154		128		388		40		186		501		87	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	126		206		292		165		130		154		128		388		40		186		501		87	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	126		206		292		165		130		154		128		388		40		186		501		87	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		2.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00		1.00		1.70		0.30	
Final Sat.:	1700		3600		1800		1700		3600		1800		1700		3600		1800		1700		3068		532	
Capacity Analysis Module:																								
Vol/Sat:	0.07		0.06		0.16		0.10		0.04		0.09		0.08		0.11		0.02		0.11		0.16		0.16	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.11		0.34		0.34		0.11		0.34		0.34		0.11		0.34		0.34		0.13		0.35		0.35	
Volume/Cap:	0.67		0.17		0.48		0.85		0.11		0.25		0.66		0.32		0.07		0.85		0.46		0.46	
Delay/Veh:	49.8		22.2		25.5		69.9		21.4		22.8		48.7		23.6		21.4		66.7		24.1		24.1	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	49.8		22.2		25.5		69.9		21.4		22.8		48.7		23.6		21.4		66.7		24.1		24.1	
LOS by Move:	D		C		C		E		C		C		D		C		C		E		C		C	
HCM2kAvgQ:	5		2		7		8		1		3		5		4		1		8		7		7	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	24.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0
Volume Module:																
Base Vol:	117	171	225		130	98	110		87	325	37		125	430	56	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	117	171	225		130	98	110		87	325	37		125	430	56	
Added Vol:	0	21	47		24	23	34		32	37	0		48	37	25	
PasserByVol:	0	27	0		20	44	0		86	-20	-2		0	0	0	
Initial Fut:	117	219	272		174	165	144		205	342	35		173	467	81	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	126	235	292		187	177	154		220	367	38		186	501	87	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	126	235	292		187	177	154		220	367	38		186	501	87	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	126	235	292		187	177	154		220	367	38		186	501	87	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.70	0.30	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3068	532	
Capacity Analysis Module:																
Vol/Sat:	0.07	0.07	0.16		0.11	0.05	0.09		0.13	0.10	0.02		0.11	0.16	0.16	
Crit Moves:			****						****					****		
Green/Cycle:	0.36	0.36	0.36		0.36	0.36	0.36		0.21	0.42	0.42		0.13	0.34	0.34	
Volume/Cap:	0.21	0.18	0.46		0.31	0.14	0.24		0.61	0.24	0.05		0.83	0.47	0.47	
Delay/Veh:	20.4	20.1	22.8		21.3	19.7	20.6		35.3	16.7	15.3		59.4	23.4	23.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	20.4	20.1	22.8		21.3	19.7	20.6		35.3	16.7	15.3		59.4	23.4	23.4	
LOS by Move:	C	C	C		C	B	C		D	B	B		E	C	C	
HCM2kAvgQ:	3	2	6		4	2	3		7	3	1		8	7	7	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.390
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	9.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	67	299	150	22	232	76	34	48	28	89	94	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	299	150	22	232	76	34	48	28	89	94	27
Added Vol:	0	26	0	0	20	11	15	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	325	150	22	252	87	49	48	28	89	94	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	82	396	183	27	307	106	60	59	34	109	115	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	396	183	27	307	106	60	59	34	109	115	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	396	183	27	307	106	60	59	34	109	115	33
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.52	0.48	1.00	0.44	0.44	0.12
Final Sat.:	1700	1800	1800	1700	1800	1800	883	865	1800	744	786	226
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.10	0.02	0.17	0.06	0.07	0.07	0.02	0.15	0.15	0.15
Crit Moves:		****									****	
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.09	0.39	0.18	0.03	0.30	0.10	0.18	0.18	0.05	0.39	0.39	0.39
Delay/Veh:	6.5	8.2	6.9	6.3	7.6	6.6	13.8	13.8	13.0	15.3	15.3	15.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.5	8.2	6.9	6.3	7.6	6.6	13.8	13.8	13.0	15.3	15.3	15.3
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	5	2	0	3	1	2	2	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	58	452	233	18	108	103	31	39	20	52	54	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	452	233	18	108	103	31	39	20	52	54	37
Added Vol:	0	47	0	0	49	22	21	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	499	233	18	157	125	52	39	20	52	54	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	564	263	20	178	141	59	44	23	59	61	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	564	263	20	178	141	59	44	23	59	61	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	564	263	20	178	141	59	44	23	59	61	42
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.59	0.41	1.00	0.38	0.37	0.25
Final Sat.:	1700	1800	1800	1700	1800	1800	995	746	1800	641	665	456
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.15	0.01	0.10	0.08	0.06	0.06	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.62	0.62	0.62	0.62	0.62	0.62	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.06	0.51	0.24	0.02	0.16	0.13	0.18	0.18	0.04	0.28	0.28	0.28
Delay/Veh:	5.0	7.4	5.7	4.9	5.4	5.3	16.0	16.0	15.1	16.7	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.0	7.4	5.7	4.9	5.4	5.3	16.0	16.0	15.1	16.7	16.7	16.7
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	7	2	0	2	1	2	2	0	3	3	3

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[22.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	696	1	
Growth Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	696	1	
Added Vol:	6	0	11	4	0	3	4	56	22		7	62	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	9	0	17	6	0	3	4	530	24		17	758	6	
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82 0.82	0.82	0.82	0.82 0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	11	0	21	7	0	4	5	648	29		21	927	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	11	0	21	7	0	4	5	648	29		21	927	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1632	1634	648	1652	1656	927	935	xxxx	xxxxx		678	xxxx	xxxxx	
Potent Cap.:	82	102	474	79	99	328	741	xxxx	xxxxx		924	xxxx	xxxxx	
Move Cap.:	79	99	474	74	96	328	741	xxxx	xxxxx		924	xxxx	xxxxx	
Total Cap:	196	216	xxxxx	190	212	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.06 0.00	0.04		0.04 0.00	0.01		0.01	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.9	xxxx	xxxxx		9.0	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	317	xxxxx	xxxx	221	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	17.6	xxxxx	xxxxx	22.2	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	17.6			22.2			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[24.4]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	10	0	8			7	0	2			3	735	3			14	564	4		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	10	0	8			7	0	2			3	735	3			14	564	4		
Added Vol:	11	0	22			8	0	6			6	104	32			11	124	8		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	21	0	30			15	0	8			9	839	35			25	688	12		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.94	0.94	0.94			0.94	0.94	0.94			0.94	0.94	0.94			0.94	0.94	0.94		
PHF Volume:	22	0	32			16	0	9			10	896	37			27	734	13		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	22	0	32			16	0	9			10	896	37			27	734	13		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1713	1715	896			1737	1740	734			747	xxxx	xxxxx			933	xxxx	xxxxx		
Potent Cap.:	72	91	342			69	88	423			870	xxxx	xxxxx			742	xxxx	xxxxx		
Move Cap.:	68	87	342			61	84	423			870	xxxx	xxxxx			742	xxxx	xxxxx		
Total Cap:	185	205	xxxxx			165	195	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.12	0.00	0.09			0.10	0.00	0.02			0.01	xxxx	xxxx			0.04	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.2	xxxx	xxxxx			10.0	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			B	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		254	xxxxx		xxxx		210	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.8	xxxxx		xxxxx		0.4	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		23.0	xxxxx		xxxxx		24.4	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		C	*		*	*	*			*	*	*		
ApproachDel:	23.0					24.4					xxxxxx					xxxxxx				
ApproachLOS:	C					C					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	620	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	620	0
Added Vol:	6	0	17	0	0	0	0	49	22	7	69	0
PasserByVol:	10	0	0	0	0	0	0	0	12	10	0	0
Initial Fut:	16	0	17	0	0	0	0	479	34	17	689	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	0	19	0	0	0	0	545	39	19	783	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	18	0	19	0	0	0	0	545	39	19	783	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1367	1367	545	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	583	xxxx	xxxxx
Potent Cap.:	164	148	542	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1001	xxxx	xxxxx
Move Cap.:	161	146	542	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1001	xxxx	xxxxx
Total Cap:	296	266	xxxxx	238	257	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	387	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.3			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: C[24.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 1	0	1	1 0 1	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	680	0	0	600	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	680	0	0	600	0
Added Vol:	11	0	32	0	0	0	0	102	32	11	132	0
PasserByVol:	42	0	3	0	0	0	0	0	27	18	0	0
Initial Fut:	53	0	35	0	0	0	0	782	59	29	732	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	56	0	37	0	0	0	0	827	62	31	774	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	56	0	37	0	0	0	0	827	62	31	774	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1663	1663	827	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	890	xxxx	xxxxx
Potent Cap.:	108	98	374	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	770	xxxx	xxxxx
Move Cap.:	105	94	374	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	770	xxxx	xxxxx
Total Cap:	240	216	xxxxx	171	199	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.23	0.00	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	280	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	24.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	24.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	620	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	620	0
Added Vol:	0	0	11	0	0	0	0	44	22	0	76	0
PasserByVol:	0	0	17	0	0	0	0	0	28	0	0	0
Initial Fut:	0	0	28	0	0	0	0	474	50	0	696	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	32	0	0	0	0	539	57	0	791	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	32	0	0	0	0	539	57	0	791	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	539	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	546	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	546	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	309	278	xxxxx	246	268	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	12.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[16.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	680	0	0	600	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	680	0	0	600	0
Added Vol:	0	0	22	0	0	0	0	102	32	0	143	0
PasserByVol:	0	0	46	0	0	0	0	0	34	0	0	0
Initial Fut:	0	0	68	0	0	0	0	782	66	0	743	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	72	0	0	0	0	827	70	0	786	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	72	0	0	0	0	827	70	0	786	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	827	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	374	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	374	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	255	229	xxxxx	173	218	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.19	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	16.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	16.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 10.0 Worst Case Level Of Service: F[115.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		28		16		4		30		20	395		26			20	590			18	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00			1.00	
Initial Bse:	10		2		28		16		4		30		20	395		26			20	590			18	
Added Vol:	43		6		0		0		0		7		0	54		2			44	26			0	
PasserByVol:	0		3		0		0		3		0		0	0		15			15	0			0	
Initial Fut:	53		11		28		16		7		37		20	449		43			79	616			18	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00			1.00	
PHF Adj:	0.89	0.89		0.89			0.89	0.89		0.89			0.89	0.89		0.89			0.89	0.89			0.89	
PHF Volume:	60		12		32		18		8		42		23	506		48			89	694			20	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	60		12		32		18		8		42		23	506		48			89	694			20	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx		xxxxx			4.1	xxxx			xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx		xxxxx			2.2	xxxx			xxxxx	
Capacity Module:																								
Cnflict Vol:	1458		1444		506		1480		1482		704		715	xxxx		xxxxx			554	xxxx			xxxxx	
Potent Cap.:	108		133		570		105		126		440		895	xxxx		xxxxx			1026	xxxx			xxxxx	
Move Cap.:	85		119		570		84		113		440		895	xxxx		xxxxx			1026	xxxx			xxxxx	
Volume/Cap:	0.70	0.10		0.06			0.22	0.07		0.09			0.03	xxxx		xxxx			0.09	xxxx			xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1	xxxx		xxxxx			0.3	xxxx			xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.1	xxxx		xxxxx			8.8	xxxx			xxxxx	
LOS by Move:	*		*		*		*		*		*		A	*		*			A	*			*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		120	xxxxx			xxxx		178	xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx		5.3	xxxxx			xxxxx		1.6	xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx		116	xxxxx			xxxxx		37.2	xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*		F	*			*		E	*			*	*		*			*	*		*		
ApproachDel:	115.7						37.2						xxxxxx						xxxxxx					
ApproachLOS:	F						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.465
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	0 1		1 0 1	0 1	
Volume Module:												
Base Vol:	10	2	28	16	4	30	20	395	26	20	590	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	2	28	16	4	30	20	395	26	20	590	18
Added Vol:	43	6	0	0	0	7	0	54	2	44	26	0
PasserByVol:	0	3	0	0	3	0	0	0	15	15	0	0
Initial Fut:	53	11	28	16	7	37	20	449	43	79	616	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	60	12	32	18	8	42	23	506	48	89	694	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	12	32	18	8	42	23	506	48	89	694	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	12	32	18	8	42	23	506	48	89	694	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.28	0.72	1.00	0.16	0.84	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	508	1292	1700	286	1514	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.01	0.03	0.03	0.01	0.28	0.03	0.05	0.39	0.01
Crit Moves:	****						****				****	
Green/Cycle:	0.21	0.21	0.21	0.21	0.21	0.21	0.11	0.55	0.55	0.17	0.61	0.61
Volume/Cap:	0.17	0.12	0.12	0.05	0.13	0.13	0.12	0.51	0.05	0.30	0.63	0.02
Delay/Veh:	29.2	28.8	28.8	28.4	29.0	29.0	36.3	13.1	9.4	33.2	12.3	6.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	28.8	28.8	28.4	29.0	29.0	36.3	13.1	9.4	33.2	12.3	6.9
LOS by Move:	C	C	C	C	C	C	D	B	A	C	B	A
HCM2kAvgQ:	1	1	1	0	1	1	1	9	1	2	13	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 128.2 Worst Case Level Of Service: F[1129.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	24		0		26		25		0		25		46		619		16		24		551		24	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	24		0		26		25		0		25		46		619		16		24		551		24	
Added Vol:	80		11		0		0		0		11		0		119		5		64		52		0	
PasserByVol:	14		5		34		0		5		2		3		0		0		36		0		0	
Initial Fut:	118		16		60		25		5		38		49		738		21		124		603		24	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95	
PHF Volume:	124		17		63		26		5		40		52		777		22		130		635		25	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	124		17		63		26		5		40		52		777		22		130		635		25	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1811		1801		777		1839		1810		647		660		xxxx		xxxxx		799		xxxx		xxxxx	
Potent Cap.:	62		81		400		59		80		474		938		xxxx		xxxxx		833		xxxx		xxxxx	
Move Cap.:	45		64		400		34		63		474		938		xxxx		xxxxx		833		xxxx		xxxxx	
Volume/Cap:	2.78		0.26		0.16		0.78		0.08		0.08		0.05		xxxx		xxxx		0.16		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.2		xxxx		xxxxx		0.6		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.1		xxxx		xxxxx		10.1		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		B		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		64		xxxxx		xxxx		75		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		21.2		xxxxx		xxxxx		5.0		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		1129		xxxxx		xxxxx		185		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		F		*		*		F		*		*		*		*		*		*		*	
ApproachDel:	1129.4						185.4						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	19.3
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	24	0	26	25	0	25	46	619	16	24	551	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	0	26	25	0	25	46	619	16	24	551	24
Added Vol:	80	11	0	0	0	11	0	119	5	64	52	0
PasserByVol:	14	5	34	0	5	2	3	0	0	36	0	0
Initial Fut:	118	16	60	25	5	38	49	738	21	124	603	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	124	17	63	26	5	40	52	777	22	130	635	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	17	63	26	5	40	52	777	22	130	635	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	124	17	63	26	5	40	52	777	22	130	635	25
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.21	0.79	1.00	0.12	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	379	1421	1700	209	1591	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.07	0.04	0.04	0.02	0.03	0.03	0.03	0.43	0.01	0.08	0.35	0.01
Crit Moves:	****							****		****		
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.17	0.59	0.59	0.12	0.54	0.54
Volume/Cap:	0.33	0.20	0.20	0.07	0.11	0.11	0.18	0.73	0.02	0.65	0.66	0.03
Delay/Veh:	28.1	27.1	27.1	26.1	26.4	26.4	30.6	15.4	7.3	43.3	15.7	9.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.1	27.1	27.1	26.1	26.4	26.4	30.6	15.4	7.3	43.3	15.7	9.2
LOS by Move:	C	C	C	C	C	C	C	B	A	D	B	A
HCM2kAvgQ:	3	2	2	1	1	1	1	16	0	5	13	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: B[10.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1 0	0	0	0	0 0	0	1 0	0	0	1! 0	0	0	0 0	0	0
Volume Module:																
Base Vol:	0	40	0	0	0	50	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	40	0	0	0	50	0	0	0	0	0	0	0	0	0	0
Added Vol:	22	3	0	0	0	31	15	46	0	6	0	0	0	0	0	0
PasserByVol:	10	0	0	0	0	0	17	17	0	10	0	0	0	0	0	0
Initial Fut:	32	43	0	0	0	81	32	63	0	16	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	40	53	0	0	0	100	40	78	0	20	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	40	53	0	0	0	100	40	78	0	20	0	0	0	0	0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	140	xxxx	xxxxx	xxxx	xxxx	xxxxx	252	252	120	xxxx	xxxx	xxxxx				
Potent Cap.:	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx	741	654	937	xxxx	xxxx	xxxxx				
Move Cap.:	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx	725	636	937	xxxx	xxxx	xxxxx				
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	760	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.4	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			10.4			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 5.6 Worst Case Level Of Service: B[12.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0 0		0 0 0	0 0	
Volume Module:												
Base Vol:	0 50	0		0 40	0		0 0	0		0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 50	0		0 40	0		0 0	0		0 0	0	
Added Vol:	32 5	0		0 47	21		86 0	11		0 0	0	
PasserByVol:	18 0	0		0 0	21		45 0	6		0 0	0	
Initial Fut:	50 55	0		0 87	42		131 0	17		0 0	0	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85		0.85 0.85	0.85	
PHF Volume:	59 65	0		0 102	49		154 0	20		0 0	0	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
FinalVolume:	59 65	0		0 102	49		154 0	20		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		6.4 6.5	6.2		xxxxx xxxx	xxxxx	
FollowUpTim:	2.2 xxxx	xxxxx		xxxxx xxxx	xxxxx		3.5 4.0	3.3		xxxxx xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	152 xxxx	xxxxx		xxxx xxxx	xxxxx		309 309	127		xxxx xxxx	xxxxx	
Potent Cap.:	1441 xxxx	xxxxx		xxxx xxxx	xxxxx		687 608	929		xxxx xxxx	xxxxx	
Move Cap.:	1441 xxxx	xxxxx		xxxx xxxx	xxxxx		665 583	929		xxxx xxxx	xxxxx	
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.23 0.00	0.02		xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
Control Del:	7.6 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	
LOS by Move:	A	*		* *	*		* *	*		* *	*	
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx 687	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx 1.0	xxxxx		xxxxx xxxx	xxxxx	
Shrd ConDel:	7.6 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx 12.0	xxxxx		xxxxx xxxx	xxxxx	
Shared LOS:	A	*		* *	*		* B	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			12.0			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	0	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	40		0		0	0	50		0			0	0		0		0	0	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00			1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Initial Bse:	0	40		0		0	0	50		0			0	0		0		0	0	0		0		0
Added Vol:	0	25		0		0	0	8		29			0	0		11		0	0	0		0		0
PasserByVol:	0	0		0		0	0	0		0			0	0		0		0	0	0		0		0
Initial Fut:	0	65		0		0	0	58		29			0	0		11		0	0	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00			1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	0.81	0.81		0.81		0.81	0.81	0.81		0.81			0.81	0.81		0.81		0.81	0.81	0.81		0.81		0.81
PHF Volume:	0	80		0		0	0	72		36			0	0		14		0	0	0		0		0
Reduct Vol:	0	0		0		0	0	0		0			0	0		0		0	0	0		0		0
FinalVolume:	0	80		0		0	0	72		36			0	0		14		0	0	0		0		0
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		6.2	xxxxx	xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		3.3	xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		90	xxxx	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		974	xxxx	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		974	xxxx	xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx		0.01	xxxx	xxxx		xxxx		
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		0.0	xxxx	xxxx		xxxxx		
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		8.7	xxxxx	xxxx		xxxxx		
LOS by Move:	*	*		*		*	*	*		*			*	*		*		A	*	*		*		*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*		*	*	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						8.7						xxxxxx					
ApproachLOS:	*						*						A						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: A[8.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	0	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	50		0		0	0	40		0			0		0		0		0		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	50		0		0	0	40		0			0		0		0		0		0		0	
Added Vol:	0	37		0		0	0	15		43			0		0		22		0		0		0	
PasserByVol:	0	0		0		0	0	0		15			0		0		12		0		0		0	
Initial Fut:	0	87		0		0	0	55		58			0		0		34		0		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.85	0.85		0.85		0.85	0.85	0.85		0.85			0.85		0.85		0.85		0.85		0.85		0.85	
PHF Volume:	0	102		0		0	0	65		68			0		0		40		0		0		0	
Reduct Vol:	0	0		0		0	0	0		0			0		0		0		0		0		0	
FinalVolume:	0	102		0		0	0	65		68			0		0		40		0		0		0	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx		xxxx		6.2		xxxxx		xxxx		xxxxx	
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx		xxxx		3.3		xxxxx		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx		xxxx		99		xxxx		xxxx		xxxxx	
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx		xxxx		962		xxxx		xxxx		xxxxx	
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx		xxxx		962		xxxx		xxxx		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx			xxxx		xxxx		0.04		xxxx		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx		xxxx		0.1		xxxx		xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx		xxxx		8.9		xxxxx		xxxx		xxxxx	
LOS by Move:	*	*		*		*	*	*		*			*		*		A		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*		*	*	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx					xxxxxx						8.9						xxxxxx						
ApproachLOS:	*					*						A						*						

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.436
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	26.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	28	28		10	28	28		10	40	40		10	40	40	
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	2	0 1	1	0	2	0 1
Volume Module:																
Base Vol:	11	16	193		64	39	109		41	362		8	110	491		33
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	11	16	193		64	39	109		41	362		8	110	491		33
Added Vol:	10	0	0		0	0	26		20	26		8	0	33		0
PasserByVol:	0	0	0		0	0	0		0	0		0	0	0		0
Initial Fut:	21	16	193		64	39	135		61	388		16	110	524		33
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.82	0.82	0.82		0.82	0.82	0.82		0.82	0.82		0.82	0.82	0.82		0.82
PHF Volume:	26	20	236		78	48	165		75	475		20	135	642		40
Reduct Vol:	0	0	0		0	0	0		0	0		0	0	0		0
Reduced Vol:	26	20	236		78	48	165		75	475		20	135	642		40
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	26	20	236		78	48	165		75	475		20	135	642		40
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	2.00		1.00	1.00	2.00		1.00
Final Sat.:	1700	1800	1800		1700	1800	1800		1700	3600		1800	1700	3600		1800
Capacity Analysis Module:																
Vol/Sat:	0.02	0.01	0.13		0.05	0.03	0.09		0.04	0.13		0.01	0.08	0.18		0.02
Crit Moves:			****		****				****					****		
Green/Cycle:	0.10	0.29	0.29		0.10	0.29	0.29		0.10	0.42		0.42	0.10	0.42		0.42
Volume/Cap:	0.15	0.04	0.45		0.44	0.09	0.31		0.42	0.32		0.03	0.76	0.43		0.05
Delay/Veh:	39.5	24.4	28.3		42.1	24.8	26.9		41.9	18.9		16.5	59.2	20.1		16.7
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	39.5	24.4	28.3		42.1	24.8	26.9		41.9	18.9		16.5	59.2	20.1		16.7
LOS by Move:	D	C	C		D	C	C		D	B		B	E	C		B
HCM2kAvgQ:	1	0	6		3	1	4		3	5		0	6	7		1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	26.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	19	57	196	59	32	51	128	522	14	86	460	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	57	196	59	32	51	128	522	14	86	460	65
Added Vol:	18	0	0	0	0	41	41	60	18	0	58	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	57	196	59	32	92	169	582	32	86	518	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	38	59	201	61	33	94	174	598	33	88	532	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	59	201	61	33	94	174	598	33	88	532	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	59	201	61	33	94	174	598	33	88	532	67
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.05	0.10	0.17	0.02	0.05	0.15	0.04
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.22	0.12	0.40	0.36	0.07	0.19	0.73	0.38	0.04	0.48	0.37	0.09
Delay/Veh:	42.1	26.9	29.7	43.3	26.5	27.5	52.0	19.5	16.5	43.9	21.3	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.1	26.9	29.7	43.3	26.5	27.5	52.0	19.5	16.5	43.9	21.3	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	2	7	6	1	3	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: F[54.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	26	2	34	6	1	6	4	612	20	19	620	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	26	2	34	6	1	6	4	612	20	19	620	8												
Added Vol:	7	0	0	0	0	0	0	20	6	0	26	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	33	2	34	6	1	6	4	632	26	19	646	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	38	2	39	7	1	7	5	734	30	22	750	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	38	2	39	7	1	7	5	734	30	22	750	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1546	1547	734	1574	1568	750	760	xxxx	xxxxx	764	xxxx	xxxxx												
Potent Cap.:	94	115	423	90	112	414	861	xxxx	xxxxx	858	xxxx	xxxxx												
Move Cap.:	90	112	423	79	109	414	861	xxxx	xxxxx	858	xxxx	xxxxx												
Volume/Cap:	0.43	0.02	0.09	0.09	0.01	0.02	0.01	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	9.3	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	148	xxxxx	xxxx	130	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	2.7	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	54.9	xxxxx	xxxxx	36.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	F	*	*	E	*	*	*	*	*	*	*												
ApproachDel:	54.9			36.3			xxxxxx			xxxxxx														
ApproachLOS:	F			E			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[22.4]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	26	2	34	6	1	6	4	612	20	19	620	8								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	26	2	34	6	1	6	4	612	20	19	620	8								
Added Vol:	7	0	0	0	0	0	0	20	6	0	26	0								
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0								
Initial Fut:	33	0	36	0	0	13	0	642	27	19	646	8								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86								
PHF Volume:	38	0	42	0	0	15	0	746	31	22	750	9								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	38	0	42	0	0	15	0	746	31	22	750	9								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1552	1549	746	1577	1571	750	xxxx	xxxx	xxxxx	777	xxxx	xxxxx								
Potent Cap.:	93	115	417	90	112	414	xxxx	xxxx	xxxxx	848	xxxx	xxxxx								
Move Cap.:	88	112	417	79	109	414	xxxx	xxxx	xxxxx	848	xxxx	xxxxx								
Total Cap:	213	236	xxxxx	196	228	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.18	0.00	0.10	0.00	0.00	0.04	xxxx	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		286	xxxxx		xxxx		414	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		1.1	xxxxx	xxxxx			0.1	xxxxx	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		22.4	xxxxx	xxxxx			14.0	xxxxx	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*	*			B	*	*	*	*				*	*	*		
ApproachDel:			22.4					14.0			xxxxx					xxxxx				
ApproachLOS:			C					B			*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: F[60.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		693		54		39		590		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		693		54		39		590		8	
Added Vol:	11		0		0		0		0		0		0		49		11		0		47		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	41		0		20		7		2		11		10		742		65		39		637		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	42		0		20		7		2		11		10		753		66		40		646		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	42		0		20		7		2		11		10		753		66		40		646		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1510		1507		753		1542		1565		646		655	xxxx	xxxxx		819		xxxx	xxxx	xxxxx			
Potent Cap.:	100		122		413		95		113		475		942	xxxx	xxxxx		818		xxxx	xxxx	xxxxx			
Move Cap.:	92		115		413		86		106		475		942	xxxx	xxxxx		818		xxxx	xxxx	xxxxx			
Volume/Cap:	0.45		0.00		0.05		0.08		0.02		0.02		0.01	xxxx	xxxx		0.05		xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0	xxxx	xxxxx		0.2		xxxx	xxxx	xxxxx			
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.9	xxxx	xxxxx		9.6		xxxx	xxxx	xxxxx			
LOS by Move:	*		*		*		*		*		*		A	*	*		A		*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		123		xxxxx		xxxx		162		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		2.3		xxxxx		xxxxx		0.4		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		60.6		xxxxx		xxxxx		30.3		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxx	xxxxx			
Shared LOS:	*		F		*		*		D		*		*	*	*		*		*	*	*			
ApproachDel:	60.6						30.3						xxxxxx						xxxxxx					
ApproachLOS:	F						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2023) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[23.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0		0	0	0 1! 0		0	1	0 1	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	693	54		39	590		8
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	30	0	20		7	2	11		10	693	54		39	590		8
Added Vol:	11	0	0		0	0	0		0	49	11		0	47		0
PasserByVol:	0	0	0		-7	-2	9		-10	17	2		0	0		0
Initial Fut:	41	0	20		0	0	20		0	759	67		39	637		8
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99		0.99
PHF Volume:	42	0	20		0	0	20		0	770	68		40	646		8
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
FinalVolume:	42	0	20		0	0	20		0	770	68		40	646		8
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1510	1504	770		1540	1564	646		xxxx	xxxx	xxxxx		838	xxxx	xxxxx	
Potent Cap.:	100	123	404		95	113	475		xxxx	xxxx	xxxxx		805	xxxx	xxxxx	
Move Cap.:	92	117	404		87	107	475		xxxx	xxxx	xxxxx		805	xxxx	xxxxx	
Total Cap:	218	240	xxxxx		200	220	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.19	0.00	0.05		0.00	0.00	0.04		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.7	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	256	xxxxx		xxxx	475	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.9	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	23.4	xxxxx		xxxxx	12.9	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	B	*		*	*	*		*	*	*	
ApproachDel:		23.4				12.9				xxxxx				xxxxx		
ApproachLOS:		C				B				*				*		

Note: Queue reported is the number of cars per lane.

Opening Year (2024) Without Project

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.406
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.1
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	17	4	65				15	35	0				5	279	30				203	214	11			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	17	4	65				15	35	0				5	279	30				203	214	11			
Added Vol:	0	0	3				0	0	0				0	12	0				2	10	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	17	4	68				15	35	0				5	291	30				205	224	11			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88			
PHF Volume:	19	5	78				17	40	0				6	333	34				234	256	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	19	5	78				17	40	0				6	333	34				234	256	13			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	19	5	78				17	40	0				6	333	34				234	256	13			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.82	0.18	1.00				0.31	0.69	1.00				1.00	1.00	1.00				1.00	0.95	0.05			
Final Sat.:	1391	327	1800				531	1238	1800				1700	1800	1800				1700	1716	84			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.04				0.03	0.03	0.00				0.00	0.18	0.02				0.14	0.15	0.15			
Crit Moves:			****											****					****					
Green/Cycle:	0.11	0.11	0.11				0.11	0.11	0.00				0.02	0.45	0.45				0.34	0.78	0.78			
Volume/Cap:	0.13	0.13	0.41				0.30	0.30	0.00				0.19	0.41	0.04				0.41	0.19	0.19			
Delay/Veh:	24.6	24.6	26.5				25.7	25.7	0.0				32.2	11.3	9.1				15.7	1.8	1.8			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	24.6	24.6	26.5				25.7	25.7	0.0				32.2	11.3	9.1				15.7	1.8	1.8			
LOS by Move:	C	C	C				C	C	A				C	B	A				B	A	A			
HCM2kAvgQ:	1	1	2				1	1	0				0	4	0				4	1	1			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.462
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	11.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	26	17	48	17	10	3	5	266	29	241	290	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	17	48	17	10	3	5	266	29	241	290	27
Added Vol:	0	0	5	0	0	0	0	32	0	5	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	17	53	17	10	3	5	298	29	246	324	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	32	21	65	21	12	4	6	365	35	301	397	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	21	65	21	12	4	6	365	35	301	397	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	21	65	21	12	4	6	365	35	301	397	33
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.62	0.38	1.00	0.64	0.36	1.00	1.00	1.00	1.00	1.00	0.92	0.08
Final Sat.:	1051	687	1800	1093	643	1800	1700	1800	1800	1700	1662	138
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.04	0.02	0.02	0.00	0.00	0.20	0.02	0.18	0.24	0.24
Crit Moves:			****					****		****		
Green/Cycle:	0.08	0.08	0.08	0.08	0.08	0.08	0.01	0.44	0.44	0.38	0.81	0.81
Volume/Cap:	0.39	0.39	0.46	0.24	0.24	0.03	0.29	0.46	0.04	0.46	0.29	0.29
Delay/Veh:	28.1	28.1	28.9	26.9	26.9	25.6	37.2	12.3	9.7	14.4	1.5	1.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.1	28.1	28.9	26.9	26.9	25.6	37.2	12.3	9.7	14.4	1.5	1.5
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	1	1	2	1	1	0	0	5	0	5	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[17.9]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	44	15	3	18	18	309	39	26	428	32								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	44	15	3	18	18	309	39	26	428	32								
Added Vol:	0	0	0	0	0	0	0	15	0	0	12	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	41	5	44	15	3	18	18	324	39	26	440	32								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	50	6	54	18	4	22	22	398	48	32	540	39								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	50	6	54	18	4	22	22	398	48	32	540	39								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	778	1086	199	851	1094	270	580	xxxx	xxxxx	446	xxxx	xxxxx								
Potent Cap.:	290	218	815	257	216	734	1004	xxxx	xxxxx	1125	xxxx	xxxxx								
Move Cap.:	267	207	815	226	205	734	1004	xxxx	xxxxx	1125	xxxx	xxxxx								
Volume/Cap:	0.19	0.03	0.07	0.08	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	22.4	xxxx	xxxxx	8.7	xxxx	xxxxx	8.3	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		388	xxxxx		xxxx	xxxx		536		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		1.2	xxxxx		xxxxx	xxxx		0.2		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		17.9	xxxxx		xxxxx	xxxx		12.1		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*	*		B		*	*	*			*	*	*		
ApproachDel:	17.9			16.4			xxxxxx			xxxxxx										
ApproachLOS:	C			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.3]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	41	5	44	15	3	18	18	309	39		26	428	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	44	15	3	18	18	309	39		26	428	32	
Added Vol:	0	0	0	0	0	0	0	15	0		0	12	0	
PasserByVol:	-41	-5	41	-15	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	85	0	0	18	18	324	39		26	481	32	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	104	0	0	22	22	398	48		32	591	39	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	104	0	0	22	22	398	48		32	591	39	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	801	1136	199	898	1145	295	630	xxxx	xxxxx		446	xxxx	xxxxx	
Potent Cap.:	279	204	815	238	201	707	962	xxxx	xxxxx		1125	xxxx	xxxxx	
Move Cap.:	260	193	815	199	191	707	962	xxxx	xxxxx		1125	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.00	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	815	xxxxx	xxxx	xxxx	707	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.3	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			10.3			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 8.5 Worst Case Level Of Service: E[41.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		1	0 0 1	0		1	0 2	0 1		1	0 2	0 1	
Volume Module:																
Base Vol:	91	27	82		27	39	30		31	263	36		58	471	92	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82		27	39	30		31	263	36		58	471	92	
Added Vol:	0	0	0		0	0	0		0	36	0		0	39	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	91	27	82		27	39	30		31	299	36		58	510	92	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	96	29	87		29	41	32		33	316	38		61	539	97	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	96	29	87		29	41	32		33	316	38		61	539	97	
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	794	1140	158		899	1080	269		636	xxxx	xxxxx		354	xxxx	xxxxx	
Potent Cap.:	282	203	866		237	220	735		957	xxxx	xxxxx		1216	xxxx	xxxxx	
Move Cap.:	214	186	866		177	202	735		957	xxxx	xxxxx		1216	xxxx	xxxxx	
Volume/Cap:	0.45	0.15	0.10		0.16	0.20	0.04		0.03	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.6	xxxx	xxxxx		0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		29.3	xxxx	xxxxx		8.9	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*		D	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	301	xxxxx		xxxx	xxxx	294		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	4.9	xxxxx		xxxxx	xxxx	1.0		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	41.0	xxxxx		xxxxx	xxxx	21.2		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	E	*		*	*	C		*	*	*		*	*	*	
ApproachDel:	41.0				23.5				xxxxxx				xxxxxx			
ApproachLOS:	E				C				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	91	27	82	27	39	30	31	263	36		58	471	92	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	91	27	82	27	39	30	31	263	36		58	471	92	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0		0	91	0	
Initial Fut:	0	0	173	0	0	30	31	299	36		58	601	92	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	183	0	0	32	33	316	38		61	635	97	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	183	0	0	32	33	316	38		61	635	97	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	821	1236	158	981	1176	317	732	xxxx	xxxxx		354	xxxx	xxxxx	
Potent Cap.:	270	178	866	207	193	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Move Cap.:	241	163	866	153	176	684	882	xxxx	xxxxx		1216	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	866	xxxxx	xxxx	xxxx	684	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			10.5			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.400
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	30.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	68	116	128	118	107	92	50	274	46	176	402	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	116	128	118	107	92	50	274	46	176	402	37
Added Vol:	0	8	3	2	6	10	12	3	0	2	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	124	131	120	113	102	62	277	46	178	404	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	140	148	136	128	115	70	313	52	201	457	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	140	148	136	128	115	70	313	52	201	457	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	140	148	136	128	115	70	313	52	201	457	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3290	310
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.08	0.08	0.04	0.06	0.04	0.09	0.03	0.12	0.14	0.14
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.11	0.33	0.33	0.12	0.32	0.32	0.17	0.37	0.37
Volume/Cap:	0.43	0.12	0.26	0.71	0.11	0.20	0.35	0.27	0.09	0.71	0.38	0.38
Delay/Veh:	43.5	24.1	25.4	54.3	23.5	24.3	41.5	25.5	23.9	47.3	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.5	24.1	25.4	54.3	23.5	24.3	41.5	25.5	23.9	47.3	23.3	23.3
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	2	3	6	1	3	2	4	1	8	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.314
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	22.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0
Volume Module:																
Base Vol:	68	116	128		118	107	92		50	274	46		176	402	37	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	116	128		118	107	92		50	274	46		176	402	37	
Added Vol:	0	8	3		2	6	10		12	3	0		2	2	1	
PasserByVol:	0	5	0		11	5	0		39	-11	-2		0	0	0	
Initial Fut:	68	129	131		131	118	102		101	266	44		178	404	38	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	77	146	148		148	134	115		114	301	50		201	457	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	77	146	148		148	134	115		114	301	50		201	457	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	77	146	148		148	134	115		114	301	50		201	457	43	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.83	0.17	
Final Sat.:	1700	3600	1800		1700	3600	1800		1700	3600	1800		1700	3290	310	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.04	0.08		0.09	0.04	0.06		0.07	0.08	0.03		0.12	0.14	0.14	
Crit Moves:			****							****			****			
Green/Cycle:	0.38	0.38	0.38		0.38	0.38	0.38		0.13	0.38	0.38		0.15	0.40	0.40	
Volume/Cap:	0.12	0.11	0.22		0.23	0.10	0.17		0.52	0.22	0.07		0.77	0.35	0.35	
Delay/Veh:	17.4	17.3	18.2		18.3	17.2	17.8		36.8	18.1	17.0		48.1	17.9	17.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.4	17.3	18.2		18.3	17.2	17.8		36.8	18.1	17.0		48.1	17.9	17.9	
LOS by Move:	B	B	B		B	B	B		D	B	B		D	B	B	
HCM2kAvgQ:	1	1	3		3	1	2		4	3	1		7	5	5	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.440
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 29.7
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	119	173	228	129	98	110	87	323	37	125	427	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	173	228	129	98	110	87	323	37	125	427	58
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	119	194	233	132	121	144	119	328	37	130	432	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	128	208	250	142	130	154	128	352	40	139	463	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	208	250	142	130	154	128	352	40	139	463	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	208	250	142	130	154	128	352	40	139	463	65
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3155	445
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.14	0.08	0.04	0.09	0.08	0.10	0.02	0.08	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35	0.11	0.35	0.35
Volume/Cap:	0.67	0.17	0.40	0.77	0.10	0.25	0.67	0.28	0.06	0.75	0.43	0.43
Delay/Veh:	48.5	20.8	23.1	57.2	20.5	21.8	48.5	21.8	20.0	55.9	23.4	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	20.8	23.1	57.2	20.5	21.8	48.5	21.8	20.0	55.9	23.4	23.4
LOS by Move:	D	C	C	E	C	C	D	C	C	E	C	C
HCM2kAvgQ:	5	2	5	6	1	3	5	4	1	6	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.456
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	23.2
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	119	173	228	129	98	110	87	323	37	125	427	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	173	228	129	98	110	87	323	37	125	427	58
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	27	0	20	44	0	86	-20	-2	0	0	0
Initial Fut:	119	221	233	152	165	144	205	308	35	130	432	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	128	237	250	163	177	154	220	330	38	139	463	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	237	250	163	177	154	220	330	38	139	463	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	237	250	163	177	154	220	330	38	139	463	65
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3155	445
Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.14	0.10	0.05	0.09	0.13	0.09	0.02	0.08	0.15	0.15
Crit Moves:			****				****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.42	0.42	0.13	0.34	0.34
Volume/Cap:	0.21	0.19	0.39	0.27	0.14	0.24	0.61	0.22	0.05	0.62	0.43	0.43
Delay/Veh:	20.4	20.1	22.1	20.9	19.7	20.6	35.3	16.6	15.3	42.1	22.9	22.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	20.1	22.1	20.9	19.7	20.6	35.3	16.6	15.3	42.1	22.9	22.9
LOS by Move:	C	C	C	C	B	C	D	B	B	D	C	C
HCM2kAvgQ:	3	2	5	3	2	3	7	3	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.385
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	67 301		151	21 238		74	33 48		30	93 94		26
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	67 301		151	21 238		74	33 48		30	93 94		26
Added Vol:	0 11		0	0 9		0	0 0		0	0 0		0
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	67 312		151	21 247		74	33 48		30	93 94		26
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.82 0.82		0.82	0.82 0.82		0.82	0.82 0.82		0.82	0.82 0.82		0.82
PHF Volume:	82 380		184	26 301		90	40 59		37	113 115		32
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
Reduced Vol:	82 380		184	26 301		90	40 59		37	113 115		32
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	82 380		184	26 301		90	40 59		37	113 115		32
Saturation Flow Module:												
Sat/Lane:	1800 1800		1800	1800 1800		1800	1800 1800		1800	1800 1800		1800
Adjustment:	0.94 1.00		1.00	0.94 1.00		1.00	0.94 1.00		1.00	0.94 1.00		1.00
Lanes:	1.00 1.00		1.00	1.00 1.00		1.00	0.42 0.58		1.00	0.45 0.43		0.12
Final Sat.:	1700 1800		1800	1700 1800		1800	716 1042		1800	766 774		214
Capacity Analysis Module:												
Vol/Sat:	0.05 0.21		0.10	0.02 0.17		0.05	0.06 0.06		0.02	0.15 0.15		0.15
Crit Moves:	****									****		
Green/Cycle:	0.55 0.55		0.55	0.55 0.55		0.55	0.38 0.38		0.38	0.38 0.38		0.38
Volume/Cap:	0.09 0.38		0.19	0.03 0.30		0.09	0.15 0.15		0.05	0.38 0.38		0.38
Delay/Veh:	6.5 8.0		6.9	6.2 7.5		6.5	12.1 12.1		11.6	13.7 13.7		13.7
User DelAdj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	6.5 8.0		6.9	6.2 7.5		6.5	12.1 12.1		11.6	13.7 13.7		13.7
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	4	2	0	3	1	1	1	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.426
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	58	460	232	19	109	104	32	39	19	52	54	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	460	232	19	109	104	32	39	19	52	54	38
Added Vol:	0	26	0	0	27	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	486	232	19	136	104	32	39	19	52	54	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	549	262	21	154	118	36	44	21	59	61	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	549	262	21	154	118	36	44	21	59	61	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	549	262	21	154	118	36	44	21	59	61	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.46	0.54	1.00	0.37	0.37	0.26
Final Sat.:	1700	1800	1800	1700	1800	1800	790	963	1800	636	661	465
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.15	0.01	0.09	0.07	0.05	0.05	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.58	0.58	0.58	0.58	0.58	0.58	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.07	0.52	0.25	0.02	0.15	0.11	0.13	0.13	0.03	0.26	0.26	0.26
Delay/Veh:	5.4	8.0	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	8.0	6.2	5.3	5.8	5.6	13.4	13.4	12.9	14.2	14.2	14.2
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	7	2	0	1	1	1	1	0	2	2	2

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[20.2]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	3	0	6	2	0	0	0	474	2		10	706	1	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	3	0	6	2	0	0	0	474	2		10	706	1	
Added Vol:	0	0	0	4	0	3	4	12	0		0	17	5	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	3	0	6	6	0	3	4	486	2		10	723	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82	0.82	
PHF Volume:	4	0	7	7	0	4	5	594	2		12	884	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	4	0	7	7	0	4	5	594	2		12	884	7	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1519	1520	594	1518	1516	884	892	xxxx	xxxxx		597	xxxx	xxxxx	
Potent Cap.:	98	120	508	99	121	347	769	xxxx	xxxxx		990	xxxx	xxxxx	
Move Cap.:	96	118	508	96	118	347	769	xxxx	xxxxx		990	xxxx	xxxxx	
Total Cap:	216	236	xxxxx	217	237	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	0.00	0.01	0.03	0.00	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	351	xxxxx	xxxx	248	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	15.6	xxxxx	xxxxx	20.2	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	C	*	*	*	*		*	*	*	
ApproachDel:	15.6			20.2			xxxxxx				xxxxxx			
ApproachLOS:	C			C			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10	0	8				7	0	2				3	745	3				14	565	4			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	10	0	8				7	0	2				3	745	3				14	565	4			
Added Vol:	0	0	0				8	0	6				6	40	0				0	38	8			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	10	0	8				15	0	8				9	785	3				14	603	12			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94			
PHF Volume:	11	0	9				16	0	9				10	838	3				15	644	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	11	0	9				16	0	9				10	838	3				15	644	13			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1541	1543	838				1536	1534	644				656	xxxx	xxxxx				841	xxxx	xxxxx			
Potent Cap.:	95	116	369				96	118	477				941	xxxx	xxxxx				803	xxxx	xxxxx			
Move Cap.:	91	113	369				91	114	477				941	xxxx	xxxxx				803	xxxx	xxxxx			
Total Cap:	215	234	xxxxx				211	233	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.05	0.00	0.02				0.08	0.00	0.02				0.01	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.9	xxxx	xxxxx				9.6	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		264	xxxxx			xxxx		262	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.2	xxxxx			xxxxx		0.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		19.7	xxxxx			xxxxx		20.2	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	19.7						20.2						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: D[27.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		29		17		5		28		19	395		30			25	602			19	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00		1.00
Initial Bse:	10		2		29		17		5		28		19	395		30			25	602			19	
Added Vol:	3		0		0		0		0		0		0	14		2			0	19			0	
PasserByVol:	0		0		0		0		0		0		0	0		0			0	0			0	
Initial Fut:	13		2		29		17		5		28		19	409		32			25	621			19	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00		1.00
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89	0.89			0.89		0.89
PHF Volume:	15		2		33		19		6		32		21	461		36			28	700			21	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	15		2		33		19		6		32		21	461		36			28	700			21	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx		xxxxx			4.1	xxxx			xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx		xxxxx			2.2	xxxx			xxxxx	
Capacity Module:																								
Cnflict Vol:	1289		1281		461		1306		1307		711		721	xxxx		xxxxx			497	xxxx			xxxxx	
Potent Cap.:	142		167		605		138		161		437		890	xxxx		xxxxx			1077	xxxx			xxxxx	
Move Cap.:	123		159		605		124		153		437		890	xxxx		xxxxx			1077	xxxx			xxxxx	
Volume/Cap:	0.12	0.01		0.05		0.15	0.04		0.07		0.02	xxxx		xxxx			0.03	xxxx		xxxx				
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			0.1	xxxx		xxxxx			0.1	xxxx			xxxxx		
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			9.1	xxxx		xxxxx			8.4	xxxx			xxxxx		
LOS by Move:	*	*		*		*	*		*			A	*		*			A	*			*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		265	xxxxx		xxxx		214	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx		0.7	xxxxx		xxxxx		1.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx		21.7	xxxxx		xxxxx		27.7	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*		C	*		*		D	*		*	*	*		*	*	*							
ApproachDel:		21.7					27.7					xxxxxx					xxxxxx							
ApproachLOS:		C					D					*					*							

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.448
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	19	19	19				19	19	19				10	32	32				10	32	32			
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10	2	29				17	5	28				19	395	30				25	602	19			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	10	2	29				17	5	28				19	395	30				25	602	19			
Added Vol:	3	0	0				0	0	0				0	14	2				0	19	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	13	2	29				17	5	28				19	409	32				25	621	19			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89				0.89	0.89	0.89			
PHF Volume:	15	2	33				19	6	32				21	461	36				28	700	21			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	15	2	33				19	6	32				21	461	36				28	700	21			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	15	2	33				19	6	32				21	461	36				28	700	21			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.06	0.94				1.00	0.15	0.85				1.00	1.00	1.00				1.00	1.00	1.00			
Final Sat.:	1700	116	1684				1700	273	1527				1700	1800	1800				1700	1800	1800			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.02	0.02				0.01	0.02	0.02				0.01	0.26	0.02				0.02	0.39	0.01			
Crit Moves:								****						****						****				
Green/Cycle:	0.18	0.18	0.18				0.18	0.18	0.18				0.10	0.58	0.58				0.18	0.67	0.67			
Volume/Cap:	0.05	0.11	0.11				0.06	0.11	0.11				0.13	0.44	0.03				0.09	0.58	0.02			
Delay/Veh:	35.6	36.1	36.1				35.7	36.1	36.1				43.9	12.7	9.4				35.9	10.3	5.9			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	35.6	36.1	36.1				35.7	36.1	36.1				43.9	12.7	9.4				35.9	10.3	5.9			
LOS by Move:	D	D	D				D	D	D				D	B	A				D	B	A			
HCM2kAvgQ:	0	1	1				1	1	1				1	8	0				1	13	0			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: E[43.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	23	0	26				26	0	24				45	618	15				25	553	25			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	23	0	26				26	0	24				45	618	15				25	553	25			
Added Vol:	5	0	0				0	0	0				0	43	5				0	41	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	28	0	26				26	0	24				45	661	20				25	594	25			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	29	0	27				27	0	25				47	696	21				26	625	26			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	29	0	27				27	0	25				47	696	21				26	625	26			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1494	1494	696				1505	1502	638				651	xxxx	xxxxx				717	xxxx	xxxxx			
Potent Cap.:	102	124	445				101	123	480				945	xxxx	xxxxx				893	xxxx	xxxxx			
Move Cap.:	91	115	445				89	113	480				945	xxxx	xxxxx				893	xxxx	xxxxx			
Volume/Cap:	0.32	0.00	0.06				0.31	0.00	0.05				0.05	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.2	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		148	xxxxx			xxxx		146	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.6	xxxxx			xxxxx		1.5	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		43.8	xxxxx			xxxxx		43.0	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		E	*			*		E	*			*	*	*				*	*	*			
ApproachDel:	43.8						43.0						xxxxxx						xxxxxx					
ApproachLOS:	E						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	23	0	26	26	0	24	45	618	15	25	553	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	0	26	26	0	24	45	618	15	25	553	25
Added Vol:	5	0	0	0	0	0	0	43	5	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	0	26	26	0	24	45	661	20	25	594	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	29	0	27	27	0	25	47	696	21	26	625	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	0	27	27	0	25	47	696	21	26	625	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	0	27	27	0	25	47	696	21	26	625	26
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	0	1800	1700	0	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.02	0.02	0.00	0.01	0.03	0.39	0.01	0.02	0.35	0.01
Crit Moves:	****							****		****		
Green/Cycle:	0.22	0.00	0.22	0.22	0.00	0.22	0.17	0.59	0.59	0.12	0.54	0.54
Volume/Cap:	0.08	0.00	0.07	0.07	0.00	0.06	0.17	0.66	0.02	0.13	0.65	0.03
Delay/Veh:	26.2	0.0	26.1	26.1	0.0	26.1	30.5	13.3	7.3	33.9	15.4	9.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.2	0.0	26.1	26.1	0.0	26.1	30.5	13.3	7.3	33.9	15.4	9.2
LOS by Move:	C	A	C	C	A	C	C	B	A	C	B	A
HCM2kAvgQ:	1	0	1	1	0	1	1	13	0	1	12	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.414
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10	28	28				10	28	28				10	40	40				10	40	40			
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	11	16	194				63	39	109				41	362			8		110	500			34	
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	11	16	194				63	39	109				41	362			8		110	500			34	
Added Vol:	3	0	0				0	0	4				3	9			2		0	11			0	
PasserByVol:	0	0	0				0	0	0				0	0			0		0	0			0	
Initial Fut:	14	16	194				63	39	113				44	371			10		110	511			34	
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82			0.82		0.82	0.82			0.82	
PHF Volume:	17	20	238				77	48	138				54	454			12		135	626			42	
Reduct Vol:	0	0	0				0	0	0				0	0			0		0	0			0	
Reduced Vol:	17	20	238				77	48	138				54	454			12		135	626			42	
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
FinalVolume:	17	20	238				77	48	138				54	454			12		135	626			42	
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800			1800		1800	1800			1800	
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00			1.00		0.94	1.00			1.00	
Lanes:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	2.00			1.00		1.00	2.00			1.00	
Final Sat.:	1700	1800	1800				1700	1800	1800				1700	3600			1800		1700	3600			1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.13				0.05	0.03	0.08				0.03	0.13			0.01		0.08	0.17			0.02	
Crit Moves:			****				****							****					****					
Green/Cycle:	0.10	0.28	0.28				0.10	0.28	0.28				0.11	0.38			0.38		0.17	0.44			0.44	
Volume/Cap:	0.10	0.04	0.47				0.47	0.10	0.28				0.29	0.33			0.02		0.47	0.40			0.05	
Delay/Veh:	43.3	27.6	32.1				47.1	28.3	30.1				43.8	23.2			20.3		40.7	20.2			17.0	
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	43.3	27.6	32.1				47.1	28.3	30.1				43.8	23.2			20.3		40.7	20.2			17.0	
LOS by Move:	D		C		C		D		C		C		D		C		C		D		C		B	
HCM2kAvgQ:	1		0		7		3		1		4		2		5		0		5		7		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.405
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	20	57	197	59	32	52	129	530	14	86	468	64
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	57	197	59	32	52	129	530	14	86	468	64
Added Vol:	7	0	0	0	0	8	9	27	7	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	57	197	59	32	60	138	557	21	86	494	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	28	59	202	61	33	62	142	572	22	88	507	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	59	202	61	33	62	142	572	22	88	507	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	59	202	61	33	62	142	572	22	88	507	66
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.04	0.02	0.03	0.08	0.16	0.01	0.05	0.14	0.04
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.16	0.12	0.40	0.36	0.07	0.12	0.60	0.37	0.03	0.48	0.35	0.09
Delay/Veh:	41.6	26.9	29.7	43.3	26.5	26.9	44.4	19.3	16.3	43.9	21.1	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.6	26.9	29.7	43.3	26.5	26.9	44.4	19.3	16.3	43.9	21.1	18.7
LOS by Move:	D	C	C	D	C	C	D	B	B	D	C	B
HCM2kAvgQ:	1	1	5	2	1	1	5	6	0	3	5	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: E[41.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25	2	34	6	1	6	4	612	20	19	630	8												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	25	2	34	6	1	6	4	612	20	19	630	8												
Added Vol:	0	0	0	0	0	0	0	9	0	0	11	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	25	2	34	6	1	6	4	621	20	19	641	8												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86												
PHF Volume:	29	2	39	7	1	7	5	721	23	22	744	9												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	29	2	39	7	1	7	5	721	23	22	744	9												
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	1528	1528	721	1552	1542	744	754	xxxx	xxxxx	744	xxxx	xxxxx												
Potent Cap.:	97	118	431	93	116	418	865	xxxx	xxxxx	872	xxxx	xxxxx												
Move Cap.:	92	115	431	82	113	418	865	xxxx	xxxxx	872	xxxx	xxxxx												
Volume/Cap:	0.31	0.02	0.09	0.09	0.01	0.02	0.01	xxxx	xxxx	0.03	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	9.2	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	166	xxxxx	xxxx	134	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	1.9	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	41.8	xxxxx	xxxxx	35.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	E	*	*	E	*	*	*	*	*	*	*												
ApproachDel:	41.8			35.2			xxxxxx			xxxxxx														
ApproachLOS:	E			E			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	25		2		34		6		1		6		4		612		20		19		630		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	25		2		34		6		1		6		4		612		20		19		630		8	
Added Vol:	0		0		0		0		0		0		0		9		0		0		11		0	
PasserByVol:	0		-2		2		-6		-1		7		-4		10		1		0		0		0	
Initial Fut:	25		0		36		0		0		13		0		631		21		19		641		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86		0.86	
PHF Volume:	29		0		42		0		0		15		0		733		24		22		744		9	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	29		0		42		0		0		15		0		733		24		22		744		9	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1534		1531		733		1555		1546		744		xxxx		xxxx		xxxxx		757		xxxx		xxxxx	
Potent Cap.:	96		118		424		93		116		418		xxxx		xxxx		xxxxx		863		xxxx		xxxxx	
Move Cap.:	91		115		424		82		113		418		xxxx		xxxx		xxxxx		863		xxxx		xxxxx	
Total Cap:	217		239		xxxxx		200		232		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.13		0.00		0.10		0.00		0.00		0.04		xxxx		xxxx		xxxx		0.03		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.3		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		305		xxxxx		xxxx		418		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.9		xxxxx		xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		20.4		xxxxx		xxxxx		13.9		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		C		*		*		B		*		*		*		*		*		*		*	
ApproachDel:	20.4						13.9						xxxxxx						xxxxxx					
ApproachLOS:	C						B						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: E[44.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	30		0		20		7		2		11		10		703		54		39		590		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	30		0		20		7		2		11		10		703		54		39		590		8	
Added Vol:	0		0		0		0		0		0		0		27		0		0		26		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	30		0		20		7		2		11		10		730		54		39		616		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	30		0		20		7		2		11		10		741		55		40		625		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	30		0		20		7		2		11		10		741		55		40		625		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1476		1474		741		1503		1520		625		633	xxxx	xxxxx		796		xxxx	xxxx	xxxxx			
Potent Cap.:	105		128		420		101		120		488		959	xxxx	xxxxx		835		xxxx	xxxx	xxxxx			
Move Cap.:	97		121		420		92		113		488		959	xxxx	xxxxx		835		xxxx	xxxx	xxxxx			
Volume/Cap:	0.31		0.00		0.05		0.08		0.02		0.02		0.01	xxxx	xxxx		0.05		xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0	xxxx	xxxxx		0.1		xxxx	xxxx	xxxxx			
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.8	xxxx	xxxxx		9.5		xxxx	xxxx	xxxxx			
LOS by Move:	*		*		*		*		*		*		A	*	*		A		*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		140		xxxxx		xxxx		172		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		1.5		xxxxx		xxxxx		0.4		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		44.5		xxxxx		xxxxx		28.7		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxx	xxxxx			
Shared LOS:	*		E		*		*		D		*		*	*	*		*		*	*	*			
ApproachDel:	44.5						28.7						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[21.1]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	1	0	1
Volume Module:														
Base Vol:	30	0	20	7	2	11	10	703	54		39	590	8	
Growth Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00		1.00 1.00	1.00	1.00	
Initial Bse:	30	0	20	7	2	11	10	703	54		39	590	8	
Added Vol:	0	0	0	0	0	0	0	27	0		0	26	0	
PasserByVol:	0	0	0	-7	-2	9	-10	17	2		0	0	0	
Initial Fut:	30	0	20	0	0	20	0	747	56		39	616	8	
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00		1.00 1.00	1.00	1.00	
PHF Adj:	0.99 0.99	0.99	0.99	0.99 0.99	0.99	0.99	0.99 0.99	0.99	0.99		0.99 0.99	0.99	0.99	
PHF Volume:	30	0	20	0	0	20	0	758	57		40	625	8	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	30	0	20	0	0	20	0	758	57		40	625	8	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1477	1470	758	1501	1519	625	xxxx	xxxx	xxxxx		815	xxxx	xxxxx	
Potent Cap.:	105	128	410	101	120	488	xxxx	xxxx	xxxxx		821	xxxx	xxxxx	
Move Cap.:	97	122	410	93	114	488	xxxx	xxxx	xxxxx		821	xxxx	xxxxx	
Total Cap:	224	247	xxxxx	207	227	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.14 0.00	0.05		0.00 0.00	0.04		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.6	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	274	xxxxx	xxxx	488	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	21.1	xxxxx	xxxxx	12.7	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	B	*	*	*	*		*	*	*	
ApproachDel:	21.1			12.7			xxxxxx				xxxxxx			
ApproachLOS:	C			B			*				*			

Note: Queue reported is the number of cars per lane.

Opening Year (2024) With Project

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.417
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.4
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	17	4	65				15	35	0				5	279	30				203	214	11			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	17	4	65				15	35	0				5	279	30				203	214	11			
Added Vol:	0	0	11				0	0	0				0	12	0				8	10	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	17	4	76				15	35	0				5	291	30				211	224	11			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88				0.88	0.88	0.88			
PHF Volume:	19	5	87				17	40	0				6	333	34				241	256	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	19	5	87				17	40	0				6	333	34				241	256	13			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	19	5	87				17	40	0				6	333	34				241	256	13			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.82	0.18	1.00				0.31	0.69	1.00				1.00	1.00	1.00				1.00	0.95	0.05			
Final Sat.:	1391	327	1800				531	1238	1800				1700	1800	1800				1700	1716	84			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.05				0.03	0.03	0.00				0.00	0.18	0.02				0.14	0.15	0.15			
Crit Moves:			****											****					****					
Green/Cycle:	0.12	0.12	0.12				0.12	0.12	0.00				0.02	0.44	0.44				0.34	0.77	0.77			
Volume/Cap:	0.12	0.12	0.42				0.28	0.28	0.00				0.19	0.42	0.04				0.42	0.19	0.19			
Delay/Veh:	24.1	24.1	26.0				25.0	25.0	0.0				32.3	11.7	9.5				15.7	2.0	2.0			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	24.1	24.1	26.0				25.0	25.0	0.0				32.3	11.7	9.5				15.7	2.0	2.0			
LOS by Move:	C	C	C				C	C	A				C	B	A				B	A	A			
HCM2kAvgQ:	1	1	2				1	1	0				0	4	0				4	1	1			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.479
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	26	17	48				17	10	3				5	266	29				241	290	27			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	26	17	48				17	10	3				5	266	29				241	290	27			
Added Vol:	0	0	16				0	0	0				0	32	0				16	34	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	26	17	64				17	10	3				5	298	29				257	324	27			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	32	21	78				21	12	4				6	365	35				315	397	33			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	32	21	78				21	12	4				6	365	35				315	397	33			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	32	21	78				21	12	4				6	365	35				315	397	33			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	0.62	0.38	1.00				0.64	0.36	1.00				1.00	1.00	1.00				1.00	0.92	0.08			
Final Sat.:	1051	687	1800				1093	643	1800				1700	1800	1800				1700	1662	138			
Capacity Analysis Module:																								
Vol/Sat:	0.03	0.03	0.04				0.02	0.02	0.00				0.00	0.20	0.02				0.19	0.24	0.24			
Crit Moves:			****											****					****					
Green/Cycle:	0.09	0.09	0.09				0.09	0.09	0.09				0.01	0.42	0.42				0.39	0.80	0.80			
Volume/Cap:	0.33	0.33	0.48				0.21	0.21	0.02				0.30	0.48	0.05				0.48	0.30	0.30			
Delay/Veh:	26.8	26.8	28.1				25.9	25.9	24.9				37.5	13.0	10.2				14.4	1.7	1.7			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	26.8	26.8	28.1				25.9	25.9	24.9				37.5	13.0	10.2				14.4	1.7	1.7			
LOS by Move:	C	C	C				C	C	C				D	B	B				B	A	A			
HCM2kAvgQ:	1	1	2				1	1	0				0	5	0				5	2	2			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[18.7]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	41	5	44	15	3	18	18	309	39	26	428	32								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	41	5	44	15	3	18	18	309	39	26	428	32								
Added Vol:	0	0	0	8	0	0	0	31	0	0	24	6								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	41	5	44	23	3	18	18	340	39	26	452	38								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	50	6	54	28	4	22	22	418	48	32	555	47								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	50	6	54	28	4	22	22	418	48	32	555	47								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	805	1127	209	875	1129	278	602	xxxx	xxxxx	465	xxxx	xxxxx								
Potent Cap.:	277	206	803	247	206	726	985	xxxx	xxxxx	1106	xxxx	xxxxx								
Move Cap.:	255	196	803	216	195	726	985	xxxx	xxxxx	1106	xxxx	xxxxx								
Volume/Cap:	0.20	0.03	0.07	0.13	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	24.2	xxxx	xxxxx	8.7	xxxx	xxxxx	8.4	xxxx	xxxxx								
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	373	xxxxx	xxxx	xxxx	523	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	18.7	xxxxx	xxxxx	xxxx	12.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*								
ApproachDel:	18.7			18.5			xxxxx			xxxxx										
ApproachLOS:	C			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[14.8]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1				1 0 2 0 1			
Volume Module:														
Base Vol:	41	5	44	15	3	18	18	309	39		26	428	32	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	5	44	15	3	18	18	309	39		26	428	32	
Added Vol:	0	0	0	8	0	0	0	31	0		0	24	6	
PasserByVol:	-41	-5	41	-15	-3	0	0	0	0		0	41	0	
Initial Fut:	0	0	85	8	0	18	18	340	39		26	493	38	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81	0.81	
PHF Volume:	0	0	104	10	0	22	22	418	48		32	606	47	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	104	10	0	22	22	418	48		32	606	47	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	828	1178	209	922	1179	303	652	xxxx	xxxxx		465	xxxx	xxxxx	
Potent Cap.:	267	192	803	228	192	699	944	xxxx	xxxxx		1106	xxxx	xxxxx	
Move Cap.:	248	182	803	191	182	699	944	xxxx	xxxxx		1106	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.13	0.05	0.00	0.03	0.02	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	24.9	xxxx	xxxxx	8.9	xxxx	xxxxx		8.4	xxxx	xxxxx	
LOS by Move:	*	*	*	C	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	803	xxxxx	xxxx	xxxx	699	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	10.3	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.1			14.8			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: E[48.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	91	27	82	27	39	30	31	263	36	58	471	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	27	82	27	39	30	31	263	36	58	471	92
Added Vol:	0	0	0	11	0	0	0	59	0	0	61	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	27	82	38	39	30	31	322	36	58	532	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	96	29	87	40	41	32	33	340	38	61	562	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	96	29	87	40	41	32	33	340	38	61	562	109
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	830	1199	170	934	1128	281	671	xxxx	xxxxx	378	xxxx	xxxxx
Potent Cap.:	266	187	850	224	206	722	929	xxxx	xxxxx	1191	xxxx	xxxxx
Move Cap.:	198	171	850	164	189	722	929	xxxx	xxxxx	1191	xxxx	xxxxx
Volume/Cap:	0.48	0.17	0.10	0.24	0.22	0.04	0.04	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.9	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	33.9	xxxx	xxxxx	9.0	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	281	xxxxx	xxxx	xxxx	278	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	5.6	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	48.5	xxxxx	xxxxx	xxxx	22.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	C	*	*	*	*	*	*
ApproachDel:	48.5			26.6			xxxxxx			xxxxxx		
ApproachLOS:	E			D			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[16.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	91	27	82	27	39	30	31	263	36	58	471	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	27	82	27	39	30	31	263	36	58	471	92
Added Vol:	0	0	0	11	0	0	0	59	0	0	61	11
PasserByVol:	-91	-27	91	-27	-39	0	0	0	0	0	91	0
Initial Fut:	0	0	173	11	0	30	31	322	36	58	623	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	183	12	0	32	33	340	38	61	658	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	183	12	0	32	33	340	38	61	658	109
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	857	1295	170	1016	1224	329	767	xxxx	xxxxx	378	xxxx	xxxxx
Potent Cap.:	254	164	850	195	181	673	856	xxxx	xxxxx	1191	xxxx	xxxxx
Move Cap.:	226	150	850	143	165	673	856	xxxx	xxxxx	1191	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.21	0.08	0.00	0.05	0.04	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	32.4	xxxx	xxxxx	9.4	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	850	xxxxx	xxxx	xxxx	673	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	10.4	xxxxx	xxxxx	xxxx	10.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	B	*	*	*	*	*	*
ApproachDel:	10.4			16.5			xxxxxx			xxxxxx		
ApproachLOS:	B			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.456
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		32		32		10		31		31		10		32		32		10		31		31	
Lanes:	1	0	2	0	1		1	0	2	0	1		1	0	2	0	1		1	0	1	1	0	
Volume Module:																								
Base Vol:	68		116		128		118		107		92		50		274		46		176		402		37	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	68		116		128		118		107		92		50		274		46		176		402		37	
Added Vol:	0		8		33		17		6		10		12		26		0		26		20		13	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	68		124		161		135		113		102		62		300		46		202		422		50	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88		0.88	
PHF Volume:	77		140		182		153		128		115		70		339		52		229		478		57	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	77		140		182		153		128		115		70		339		52		229		478		57	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	77		140		182		153		128		115		70		339		52		229		478		57	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		2.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00		1.00		1.79		0.21	
Final Sat.:	1700		3600		1800		1700		3600		1800		1700		3600		1800		1700		3219		381	
Capacity Analysis Module:																								
Vol/Sat:	0.05		0.04		0.10		0.09		0.04		0.06		0.04		0.09		0.03		0.13		0.15		0.15	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.11		0.32		0.32		0.11		0.33		0.33		0.12		0.32		0.32		0.17		0.37		0.37	
Volume/Cap:	0.43		0.12		0.32		0.80		0.11		0.20		0.35		0.29		0.09		0.80		0.40		0.40	
Delay/Veh:	43.6		24.1		26.0		64.3		23.5		24.4		41.5		25.7		23.9		54.9		23.6		23.6	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	43.6		24.1		26.0		64.3		23.5		24.4		41.5		25.7		23.9		54.9		23.6		23.6	
LOS by Move:	D		C		C		E		C		C		D		C		C		D		C		C	
HCM2kAvgQ:	3		2		4		7		1		3		2		4		1		9		6		6	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	22.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	68	116	128	118	107	92	50	274	46	176	402	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	116	128	118	107	92	50	274	46	176	402	37
Added Vol:	0	8	33	17	6	10	12	26	0	26	20	13
PasserByVol:	0	5	0	11	5	0	39	-11	-2	0	0	0
Initial Fut:	68	129	161	146	118	102	101	289	44	202	422	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	77	146	182	165	134	115	114	327	50	229	478	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	146	182	165	134	115	114	327	50	229	478	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	146	182	165	134	115	114	327	50	229	478	57
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3219	381
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.10	0.10	0.04	0.06	0.07	0.09	0.03	0.13	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.14	0.36	0.36	0.20	0.42	0.42
Volume/Cap:	0.13	0.11	0.28	0.27	0.10	0.18	0.50	0.26	0.08	0.67	0.35	0.35
Delay/Veh:	19.7	19.5	21.0	20.9	19.4	20.1	37.7	20.7	19.3	38.5	17.9	17.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.7	19.5	21.0	20.9	19.4	20.1	37.7	20.7	19.3	38.5	17.9	17.9
LOS by Move:	B	B	C	C	B	C	D	C	B	D	B	B
HCM2kAvgQ:	2	1	4	3	1	2	4	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.523
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	32.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	119	173	228	129	98	110	87	323	37	125	427	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	173	228	129	98	110	87	323	37	125	427	58
Added Vol:	0	21	50	26	23	34	32	38	0	50	39	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	119	194	278	155	121	144	119	361	37	175	466	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	128	208	298	166	130	154	128	387	40	188	500	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	208	298	166	130	154	128	387	40	188	500	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	208	298	166	130	154	128	387	40	188	500	90
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.69	0.31
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3050	550
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.17	0.10	0.04	0.09	0.08	0.11	0.02	0.11	0.16	0.16
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.11	0.32	0.32	0.15	0.35	0.35
Volume/Cap:	0.68	0.18	0.52	0.74	0.11	0.25	0.66	0.34	0.07	0.74	0.46	0.46
Delay/Veh:	52.7	24.6	28.5	54.5	22.5	23.9	50.4	26.1	23.7	52.1	25.2	25.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.7	24.6	28.5	54.5	22.5	23.9	50.4	26.1	23.7	52.1	25.2	25.2
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	2	8	7	1	3	5	5	1	8	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	25.0
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	119	173	228	129	98	110	87	323	37	125	427	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	173	228	129	98	110	87	323	37	125	427	58
Added Vol:	0	21	50	26	23	34	32	38	0	50	39	26
PasserByVol:	0	27	0	20	44	0	86	-20	-2	0	0	0
Initial Fut:	119	221	278	175	165	144	205	341	35	175	466	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	128	237	298	188	177	154	220	366	38	188	500	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	237	298	188	177	154	220	366	38	188	500	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	237	298	188	177	154	220	366	38	188	500	90
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.69	0.31
Final Sat.:	1700	3600	1800	1700	3600	1800	1700	3600	1800	1700	3050	550
Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.17	0.11	0.05	0.09	0.13	0.10	0.02	0.11	0.16	0.16
Crit Moves:			****				****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.42	0.42	0.13	0.34	0.34
Volume/Cap:	0.21	0.19	0.47	0.31	0.14	0.24	0.61	0.24	0.05	0.83	0.48	0.48
Delay/Veh:	20.4	20.1	22.9	21.3	19.7	20.6	35.3	16.7	15.3	60.9	23.4	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	20.1	22.9	21.3	19.7	20.6	35.3	16.7	15.3	60.9	23.4	23.4
LOS by Move:	C	C	C	C	B	C	D	B	B	E	C	C
HCM2kAvgQ:	3	2	7	4	2	3	7	3	1	8	7	7

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.394
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	9.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module:												
Base Vol:	67 301		151	21 238		74	33 48		30	93 94		26
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	67 301		151	21 238		74	33 48		30	93 94		26
Added Vol:	0 26		0	0 20		12	15 0		0	0 0		0
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	67 327		151	21 258		86	48 48		30	93 94		26
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.82 0.82		0.82	0.82 0.82		0.82	0.82 0.82		0.82	0.82 0.82		0.82
PHF Volume:	82 399		184	26 315		105	59 59		37	113 115		32
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
Reduced Vol:	82 399		184	26 315		105	59 59		37	113 115		32
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	82 399		184	26 315		105	59 59		37	113 115		32
Saturation Flow Module:												
Sat/Lane:	1800 1800		1800	1800 1800		1800	1800 1800		1800	1800 1800		1800
Adjustment:	0.94 1.00		1.00	0.94 1.00		1.00	0.94 1.00		1.00	0.94 1.00		1.00
Lanes:	1.00 1.00		1.00	1.00 1.00		1.00	0.51 0.49		1.00	0.45 0.43		0.12
Final Sat.:	1700 1800		1800	1700 1800		1800	874 874		1800	766 774		214
Capacity Analysis Module:												
Vol/Sat:	0.05 0.22		0.10	0.02 0.17		0.06	0.07 0.07		0.02	0.15 0.15		0.15
Crit Moves:	****									****		
Green/Cycle:	0.56 0.56		0.56	0.56 0.56		0.56	0.38 0.38		0.38	0.38 0.38		0.38
Volume/Cap:	0.09 0.39		0.18	0.03 0.31		0.10	0.18 0.18		0.05	0.39 0.39		0.39
Delay/Veh:	6.6 8.2		7.0	6.3 7.7		6.6	13.7 13.7		13.0	15.2 15.2		15.2
User DelAdj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	6.6 8.2		7.0	6.3 7.7		6.6	13.7 13.7		13.0	15.2 15.2		15.2
LOS by Move:	A A		A	A A		A	B B		B	B B		B
HCM2kAvgQ:	1 5		2	0 3		1	2 2		0	4 4		4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.438
Loss Time (sec):	4 (Y+R=3.0 sec)	Average Delay (sec/veh):	8.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	58	460	232	19	109	104	32	39	19	52	54	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	460	232	19	109	104	32	39	19	52	54	38
Added Vol:	0	48	0	0	50	23	23	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	508	232	19	159	127	55	39	19	52	54	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	66	574	262	21	180	144	62	44	21	59	61	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	574	262	21	180	144	62	44	21	59	61	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	574	262	21	180	144	62	44	21	59	61	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.60	0.40	1.00	0.37	0.37	0.26
Final Sat.:	1700	1800	1800	1700	1800	1800	1018	722	1800	636	661	465
Capacity Analysis Module:												
Vol/Sat:	0.04	0.32	0.15	0.01	0.10	0.08	0.06	0.06	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.62	0.62	0.62	0.62	0.62	0.62	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.06	0.52	0.24	0.02	0.16	0.13	0.19	0.19	0.04	0.29	0.29	0.29
Delay/Veh:	5.0	7.5	5.7	4.9	5.4	5.3	16.0	16.0	15.1	16.7	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.0	7.5	5.7	4.9	5.4	5.3	16.0	16.0	15.1	16.7	16.7	16.7
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	7	2	0	2	1	2	2	0	3	3	3

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[22.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	3	0	6				2	0	0				0	474	2				10	706	1			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	3	0	6				2	0	0				0	474	2				10	706	1			
Added Vol:	6	0	12				4	0	3				4	58	23				8	64	5			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	9	0	18				6	0	3				4	532	25				18	770	6			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82				0.82	0.82	0.82			
PHF Volume:	11	0	22				7	0	4				5	651	31				22	942	7			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	11	0	22				7	0	4				5	651	31				22	942	7			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1652	1654	651				1673	1677	942				949	xxxx	xxxxx				681	xxxx	xxxxx			
Potent Cap.:	79	99	472				77	96	322				732	xxxx	xxxxx				921	xxxx	xxxxx			
Move Cap.:	77	96	472				72	93	322				732	xxxx	xxxxx				921	xxxx	xxxxx			
Total Cap:	192	212	xxxxx				186	208	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.06	0.00	0.05				0.04	0.00	0.01				0.01	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				10.0	xxxx	xxxxx				9.0	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		317	xxxxx			xxxx		216	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.3	xxxxx			xxxxx		0.2	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		17.7	xxxxx			xxxxx		22.6	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	17.7						22.6						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[25.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	10		0		8		7		0		2		3	745		3			14	565		4	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00	
Initial Bse:	10		0		8		7		0		2		3	745		3			14	565		4	
Added Vol:	11		0		23		8		0		6		6	108		34			11	129		8	
PasserByVol:	0		0		0		0		0		0		0	0		0			0	0		0	
Initial Fut:	21		0		31		15		0		8		9	853		37			25	694		12	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00	
PHF Adj:	0.94	0.94		0.94			0.94	0.94		0.94			0.94	0.94		0.94			0.94	0.94		0.94	
PHF Volume:	22		0		33		16		0		9		10	910		39			27	741		13	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0		0	
FinalVolume:	22		0		33		16		0		9		10	910		39			27	741		13	
Critical Gap Module:																								
Critical Gp:	7.1	6.5		6.2			7.1	6.5		6.2			4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0		3.3			3.5	4.0		3.3			2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1734	1737		910			1760	1763		741			754	xxxx	xxxxx				950	xxxx	xxxxx			
Potent Cap.:	70	88		335			67	85		420			866	xxxx	xxxxx				731	xxxx	xxxxx			
Move Cap.:	66	84		335			58	81		420			866	xxxx	xxxxx				731	xxxx	xxxxx			
Total Cap:	182	202	xxxxx				161	192	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.12	0.00		0.10			0.10	0.00		0.02			0.01	xxxx		xxxx			0.04	xxxx		xxxx		
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.2	xxxx	xxxxx				10.1	xxxx	xxxxx			
LOS by Move:	*	*		*			*	*		*			A	*		*			B	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	250	xxxxx				xxxx	205	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.8	xxxxx				xxxxx	0.4	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	23.4	xxxxx				xxxxx	25.0	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	C		*			*	C		*			*	*		*			*	*		*		
ApproachDel:	23.4						25.0						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 1	0	1	1 0 1	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	630	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	630	0
Added Vol:	6	0	18	0	0	0	0	50	23	8	71	0
PasserByVol:	10	0	0	0	0	0	0	0	12	10	0	0
Initial Fut:	16	0	18	0	0	0	0	480	35	18	701	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	0	20	0	0	0	0	546	40	20	797	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	18	0	20	0	0	0	0	546	40	20	797	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1384	1384	546	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	586	xxxx	xxxxx
Potent Cap.:	160	145	542	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	999	xxxx	xxxxx
Move Cap.:	157	142	542	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	999	xxxx	xxxxx
Total Cap:	292	262	xxxxx	233	253	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	386	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.4			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[24.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	680	0	0	600	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	680	0	0	600	0
Added Vol:	11	0	34	0	0	0	0	104	34	11	137	0
PasserByVol:	44	0	3	0	0	0	0	0	29	19	0	0
Initial Fut:	55	0	37	0	0	0	0	784	63	30	737	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	58	0	39	0	0	0	0	829	67	32	780	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	58	0	39	0	0	0	0	829	67	32	780	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1672	1672	829	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	896	xxxx	xxxxx
Potent Cap.:	106	97	373	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	766	xxxx	xxxxx
Move Cap.:	103	93	373	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	766	xxxx	xxxxx
Total Cap:	238	214	xxxxx	168	197	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.24	0.00	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	279	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	24.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	24.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	430	0	0	630	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	430	0	0	630	0
Added Vol:	0	0	12	0	0	0	0	45	23	0	78	0
PasserByVol:	0	0	17	0	0	0	0	0	28	0	0	0
Initial Fut:	0	0	29	0	0	0	0	475	51	0	708	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	33	0	0	0	0	540	58	0	805	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	33	0	0	0	0	540	58	0	805	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	540	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	546	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	546	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	305	274	xxxxx	243	265	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	12.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[17.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	680	0	0	600	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	680	0	0	600	0
Added Vol:	0	0	23	0	0	0	0	105	34	0	148	0
PasserByVol:	0	0	46	0	0	0	0	0	34	0	0	0
Initial Fut:	0	0	69	0	0	0	0	785	68	0	748	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	73	0	0	0	0	830	72	0	791	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	73	0	0	0	0	830	72	0	791	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	830	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	373	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	373	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	253	228	xxxxx	171	216	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	17.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	17.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 11.5 Worst Case Level Of Service: F[134.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	10		2		29		17		5		28		19	395		30			25	602			19	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00	
Initial Bse:	10		2		29		17		5		28		19	395		30			25	602			19	
Added Vol:	44		6		0		0		0		8		0	55		2			45	26			0	
PasserByVol:	0		3		0		0		3		0		0	0		15			15	0			0	
Initial Fut:	54		11		29		17		8		36		19	450		47			85	628			19	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00	
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89			0.89	0.89	0.89		0.89		0.89	0.89	0.89			0.89	
PHF Volume:	61		12		33		19		9		41		21	507		53			96	708			21	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
FinalVolume:	61		12		33		19		9		41		21	507		53			96	708			21	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1	xxxx		xxxxx			4.1	xxxx			xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2	xxxx		xxxxx			2.2	xxxx			xxxxx	
Capacity Module:																								
Cnflict Vol:	1485		1471		507		1509		1513		718		729	xxxx		xxxxx			560	xxxx			xxxxx	
Potent Cap.:	104		128		570		100		121		432		884	xxxx		xxxxx			1021	xxxx			xxxxx	
Move Cap.:	80		114		570		79		107		432		884	xxxx		xxxxx			1021	xxxx			xxxxx	
Volume/Cap:	0.76	0.11		0.06		0.24	0.08		0.09			0.02	xxxx		xxxx			0.09	xxxx			xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1	xxxx		xxxxx			0.3	xxxx			xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.2	xxxx		xxxxx			8.9	xxxx			xxxxx	
LOS by Move:	*		*		*		*		*		*		A	*		*			A	*			*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		115	xxxxx			xxxx		163	xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx			xxxxx	
SharedQueue:	xxxxx		5.8	xxxxx			xxxxx		1.9	xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx			xxxxx	
Shrd ConDel:	xxxxx		135	xxxxx			xxxxx		42.2	xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx			xxxxx	
Shared LOS:	*		F	*			*		E	*			*	*		*			*	*			*	
ApproachDel:	134.6						42.2						xxxxxx						xxxxxx					
ApproachLOS:	F						E						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.473
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	19	19	19		19	19	19		10	32	32		10	32	32	
Lanes:	1 0	0	1	0	1 0	0	1	0	1 0	1	0	1	1 0	1	0	1
Volume Module:																
Base Vol:	10	2	29		17	5	28		19	395	30		25	602	19	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	10	2	29		17	5	28		19	395	30		25	602	19	
Added Vol:	44	6	0		0	0	8		0	55	2		45	26	0	
PasserByVol:	0	3	0		0	3	0		0	0	15		15	0	0	
Initial Fut:	54	11	29		17	8	36		19	450	47		85	628	19	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89		0.89	0.89	0.89		0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	61	12	33		19	9	41		21	507	53		96	708	21	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	61	12	33		19	9	41		21	507	53		96	708	21	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	61	12	33		19	9	41		21	507	53		96	708	21	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	0.28	0.72		1.00	0.18	0.82		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat.:	1700	495	1305		1700	327	1473		1700	1800	1800		1700	1800	1800	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.03	0.03		0.01	0.03	0.03		0.01	0.28	0.03		0.06	0.39	0.01	
Crit Moves:	****								****					****		
Green/Cycle:	0.21	0.21	0.21		0.21	0.21	0.21		0.11	0.55	0.55		0.17	0.61	0.61	
Volume/Cap:	0.17	0.12	0.12		0.05	0.13	0.13		0.11	0.51	0.05		0.33	0.64	0.02	
Delay/Veh:	29.3	28.9	28.9		28.4	29.0	29.0		36.3	13.1	9.4		33.4	12.5	6.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	29.3	28.9	28.9		28.4	29.0	29.0		36.3	13.1	9.4		33.4	12.5	6.9	
LOS by Move:	C	C	C		C	C	C		D	B	A		C	B	A	
HCM2kAvgQ:	2	1	1		0	1	1		1	9	1		3	13	0	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 138.8 Worst Case Level Of Service: F[1210.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	23	0	26				26	0	24				45	618	15				25	553	25			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	23	0	26				26	0	24				45	618	15				25	553	25			
Added Vol:	84	11	0				0	0	11				0	123	5				68	52	0			
PasserByVol:	14	5	34				0	5	2				3	0	0				37	0	0			
Initial Fut:	121	16	60				26	5	37				48	741	20				130	605	25			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	127	17	63				27	5	39				51	780	21				137	637	26			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	127	17	63				27	5	39				51	780	21				137	637	26			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1826	1818	780				1855	1825	650				663	xxxx	xxxxx				801	xxxx	xxxxx			
Potent Cap.:	60	79	399				57	78	473				935	xxxx	xxxxx				831	xxxx	xxxxx			
Move Cap.:	43	62	399				32	62	473				935	xxxx	xxxxx				831	xxxx	xxxxx			
Volume/Cap:	2.95	0.27	0.16				0.85	0.09	0.08				0.05	xxxx	xxxx				0.16	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx				0.6	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.1	xxxx	xxxxx				10.2	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		61	xxxxx			xxxx		70	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	21.8	xxxxx				xxxxx	5.3	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	1210	xxxxx				xxxxx	213	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	F	*				*	F	*				*	*	*				*	*	*			
ApproachDel:	1210.1						213.0						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec): 80 Critical Vol./Cap.(X): 0.636
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 19.6
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	19	19	19				19	19	19				10	32	32				10	32	32			
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	23	0	26				26	0	24				45	618	15				25	553	25			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	23	0	26				26	0	24				45	618	15				25	553	25			
Added Vol:	84	11	0				0	0	11				0	123	5				68	52	0			
PasserByVol:	14	5	34				0	5	2				3	0	0				37	0	0			
Initial Fut:	121	16	60				26	5	37				48	741	20				130	605	25			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	127	17	63				27	5	39				51	780	21				137	637	26			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	127	17	63				27	5	39				51	780	21				137	637	26			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	127	17	63				27	5	39				51	780	21				137	637	26			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.21	0.79				1.00	0.12	0.88				1.00	1.00	1.00				1.00	1.00	1.00			
Final Sat.:	1700	379	1421				1700	214	1586				1700	1800	1800				1700	1800	1800			
Capacity Analysis Module:																								
Vol/Sat:	0.07	0.04	0.04				0.02	0.02	0.02				0.03	0.43	0.01				0.08	0.35	0.01			
Crit Moves:	****													****					****					
Green/Cycle:	0.24	0.24	0.24				0.24	0.24	0.24				0.16	0.56	0.56				0.13	0.52	0.52			
Volume/Cap:	0.32	0.19	0.19				0.07	0.10	0.10				0.18	0.77	0.02				0.64	0.68	0.03			
Delay/Veh:	25.6	24.6	24.6				23.7	23.9	23.9				29.1	17.2	7.8				39.9	16.0	9.2			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	25.6	24.6	24.6				23.7	23.9	23.9				29.1	17.2	7.8				39.9	16.0	9.2			
LOS by Move:	C	C	C				C	C	C				C	B	A				D	B	A			
HCM2kAvgQ:	3	2	2				1	1	1				1	16	0				5	12	0			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: B[10.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0 40	0		0 60	0		0	0	0	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 40	0		0 60	0		0	0	0	0	0	0
Added Vol:	23 3	0		0 32	15		47	0	6	0	0	0
PasserByVol:	10 0	0		0 0	17		17	0	10	0	0	0
Initial Fut:	33 43	0		0 92	32		64	0	16	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81 0.81	0.81		0.81 0.81	0.81		0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	41 53	0		0 114	40		79	0	20	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
FinalVolume:	41 53	0		0 114	40		79	0	20	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx		xxxxx xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	153 xxxx	xxxxx		xxxx xxxx	xxxxx		268	268	134	xxxx	xxxx	xxxxx
Potent Cap.:	1440 xxxx	xxxxx		xxxx xxxx	xxxxx		725	641	921	xxxx	xxxx	xxxxx
Move Cap.:	1440 xxxx	xxxxx		xxxx xxxx	xxxxx		709	623	921	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.11	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*		* *	*		*	*	*	*	*	*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	743	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	10.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*		* *	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.6			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 5.7 Worst Case Level Of Service: B[12.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	50	0	0	40	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	50	0	0	40	0	0	0	0	0	0	0
Added Vol:	34	5	0	0	50	23	91	0	11	0	0	0
PasserByVol:	18	0	0	0	0	22	45	0	6	0	0	0
Initial Fut:	52	55	0	0	90	45	136	0	17	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	61	65	0	0	106	53	160	0	20	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	61	65	0	0	106	53	160	0	20	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	159	xxxx	xxxxx	xxxx	xxxx	xxxxx	319	319	132	xxxx	xxxx	xxxxx
Potent Cap.:	1433	xxxx	xxxxx	xxxx	xxxx	xxxxx	678	601	922	xxxx	xxxx	xxxxx
Move Cap.:	1433	xxxx	xxxxx	xxxx	xxxx	xxxxx	655	574	922	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.24	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	677	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.2			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[8.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	0	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	40		0		0	0	60		0			0	0		0		0	0	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00			1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Initial Bse:	0	40		0		0	0	60		0			0	0		0		0	0	0		0		0
Added Vol:	0	26		0		0	0	8		30			0	0		12		0	0	0		0		0
PasserByVol:	0	0		0		0	0	0		0			0	0		0		0	0	0		0		0
Initial Fut:	0	66		0		0	0	68		30			0	0		12		0	0	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00			1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	0.81	0.81		0.81		0.81	0.81	0.81		0.81			0.81	0.81		0.81		0.81	0.81	0.81		0.81		0.81
PHF Volume:	0	82		0		0	0	84		37			0	0		15		0	0	0		0		0
Reduct Vol:	0	0		0		0	0	0		0			0	0		0		0	0	0		0		0
FinalVolume:	0	82		0		0	0	84		37			0	0		15		0	0	0		0		0
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		6.2	xxxxx	xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		3.3	xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		103	xxxx	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		958	xxxx	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		958	xxxx	xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx		0.02	xxxx	xxxx		xxxx		
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		0.0	xxxx	xxxx		xxxxx		
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		8.8	xxxxx	xxxx		xxxxx		
LOS by Move:	*	*		*		*	*	*		*			*	*		*		A	*	*		*		*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*		*	*	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						8.8						xxxxxx					
ApproachLOS:	*						*						A						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: A[8.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 0	1	0	0	0 0	0	1	0	0 0	0	0	1	0 0	0	0	0
Volume Module:																
Base Vol:	0	50	0		0	40	0		0	0	0		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	50	0		0	40	0		0	0	0		0	0	0	
Added Vol:	0	38	0		0	16	45		0	0	23		0	0	0	
PasserByVol:	0	0	0		0	0	15		0	0	12		0	0	0	
Initial Fut:	0	88	0		0	56	60		0	0	35		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85	
PHF Volume:	0	104	0		0	66	71		0	0	41		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	104	0		0	66	71		0	0	41		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	6.2		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	101		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	960		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	960		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	0.04		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	0.1		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	8.9		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	A		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				8.9				xxxxxx			
ApproachLOS:	*				*				A				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.437
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 28.3
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	11		16		194		63		39		109		41		362		8		110		500		34	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	11		16		194		63		39		109		41		362		8		110		500		34	
Added Vol:	11		0		0		0		0		27		21		26		8		0		34		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	22		16		194		63		39		136		62		388		16		110		534		34	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82	
PHF Volume:	27		20		238		77		48		167		76		475		20		135		654		42	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	27		20		238		77		48		167		76		475		20		135		654		42	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	27		20		238		77		48		167		76		475		20		135		654		42	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.01		0.13		0.05		0.03		0.09		0.04		0.13		0.01		0.08		0.18		0.02	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.11		0.30		0.30		0.10		0.30		0.30		0.10		0.41		0.41		0.10		0.42		0.42	
Volume/Cap:	0.15		0.04		0.44		0.44		0.09		0.31		0.44		0.32		0.03		0.77		0.44		0.06	
Delay/Veh:	42.9		25.9		30.0		45.9		26.6		28.8		46.1		20.9		18.2		63.8		22.1		18.4	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	42.9		25.9		30.0		45.9		26.6		28.8		46.1		20.9		18.2		63.8		22.1		18.4	
LOS by Move:	D		C		C		D		C		C		D		C		B		E		C		B	
HCM2kAvgQ:	1		0		6		3		1		4		3		5		0		6		8		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.437
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		28		28		10		28		28		10		40		40		10		40		40	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	20		57		197		59		32		52		129		530		14		86		468		64	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	20		57		197		59		32		52		129		530		14		86		468		64	
Added Vol:	18		0		0		0		0		42		43		61		19		0		60		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	38		57		197		59		32		94		172		591		33		86		528		64	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	39		59		202		61		33		97		177		607		34		88		542		66	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	39		59		202		61		33		97		177		607		34		88		542		66	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	39		59		202		61		33		97		177		607		34		88		542		66	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00	
Final Sat.:	1700		1800		1800		1700		1800		1800		1700		3600		1800		1700		3600		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.03		0.11		0.04		0.02		0.05		0.10		0.17		0.02		0.05		0.15		0.04	
Crit Moves:					****		****						****								****			
Green/Cycle:	0.10		0.28		0.28		0.10		0.28		0.28		0.14		0.43		0.43		0.11		0.40		0.40	
Volume/Cap:	0.23		0.12		0.40		0.36		0.07		0.19		0.74		0.39		0.04		0.48		0.38		0.09	
Delay/Veh:	42.1		26.9		29.7		43.3		26.5		27.6		53.1		19.6		16.5		43.9		21.4		18.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	42.1		26.9		29.7		43.3		26.5		27.6		53.1		19.6		16.5		43.9		21.4		18.7	
LOS by Move:	D		C		C		D		C		C		D		B		B		D		C		B	
HCM2kAvgQ:	1		1		5		2		1		2		7		6		1		3		6		1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: F[56.4]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	25	2	34	6		1	6				4	612		20		19	630		8	
Growth Adj:	1.00	1.00	1.00	1.00		1.00	1.00				1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	25	2	34	6		1	6				4	612		20		19	630		8	
Added Vol:	8	0	0	0		0	0				0	20		6		0	26		0	
PasserByVol:	0	0	0	0		0	0				0	0		0		0	0		0	
Initial Fut:	33	2	34	6		1	6				4	632		26		19	656		8	
User Adj:	1.00	1.00	1.00	1.00		1.00	1.00				1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.86	0.86	0.86	0.86		0.86	0.86				0.86	0.86		0.86		0.86	0.86		0.86	
PHF Volume:	38	2	39	7		1	7				5	734		30		22	762		9	
Reduct Vol:	0	0	0	0		0	0				0	0		0		0	0		0	
FinalVolume:	38	2	39	7		1	7				5	734		30		22	762		9	
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1		6.5	6.2				4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3	3.5		4.0	3.3				2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1558	1559	734	1585		1580	762				771	xxxx	xxxxx			764	xxxx	xxxxx		
Potent Cap.:	92	114	423	88		110	408				853	xxxx	xxxxx			858	xxxx	xxxxx		
Move Cap.:	88	110	423	77		107	408				853	xxxx	xxxxx			858	xxxx	xxxxx		
Volume/Cap:	0.44	0.02	0.09	0.09		0.01	0.02				0.01	xxxx	xxxx			0.03	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx		xxxx	xxxxx				0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx		xxxx	xxxxx				9.2	xxxx	xxxxx			9.3	xxxx	xxxxx		
LOS by Move:	*	*	*	*		*	*				A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		146	xxxxx		xxxx		128	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		2.7	xxxxx		xxxxx		0.4	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		56.4	xxxxx		xxxxx		37.0	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*		F	*		*		E	*		*	*	*			*	*	*		
ApproachDel:	56.4					37.0					xxxxxx					xxxxxx				
ApproachLOS:	F					E					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[22.6]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	25	2	34	6	1	6	4	612	20	19	630	8								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	25	2	34	6	1	6	4	612	20	19	630	8								
Added Vol:	8	0	0	0	0	0	0	20	6	0	26	0								
PasserByVol:	0	-2	2	-6	-1	7	-4	10	1	0	0	0								
Initial Fut:	33	0	36	0	0	13	0	642	27	19	656	8								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86								
PHF Volume:	38	0	42	0	0	15	0	746	31	22	762	9								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	38	0	42	0	0	15	0	746	31	22	762	9								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1564	1561	746	1588	1583	762	xxxx	xxxx	xxxxx	777	xxxx	xxxxx								
Potent Cap.:	92	113	417	88	110	408	xxxx	xxxx	xxxxx	848	xxxx	xxxxx								
Move Cap.:	86	110	417	78	107	408	xxxx	xxxx	xxxxx	848	xxxx	xxxxx								
Total Cap:	211	234	xxxxx	194	226	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.18	0.00	0.10	0.00	0.00	0.04	xxxx	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		284	xxxxx		xxxx		408	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		1.1	xxxxx	xxxxx			0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx		22.6	xxxxx	xxxxx			14.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*		C	*	*			B	*	*	*	*	*	*	*					
ApproachDel:			22.6					14.2			xxxxxx					xxxxxx				
ApproachLOS:			C					B			*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: F[62.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 1! 0		0		0 0 1! 0		0		1 0 1 0		1		1 0 1 0		1	
Volume Module:																
Base Vol:	30	0	20		7	2	11		10	703	54		39	590	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	20		7	2	11		10	703	54		39	590	8	
Added Vol:	11	0	0		0	0	0		0	50	11		0	48	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	41	0	20		7	2	11		10	753	65		39	638	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	42	0	20		7	2	11		10	764	66		40	647	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	42	0	20		7	2	11		10	764	66		40	647	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1522	1519	764		1554	1577	647		656	xxxx	xxxxx		830	xxxx	xxxxx	
Potent Cap.:	98	120	407		93	111	474		941	xxxx	xxxxx		811	xxxx	xxxxx	
Move Cap.:	90	113	407		84	104	474		941	xxxx	xxxxx		811	xxxx	xxxxx	
Volume/Cap:	0.46	0.00	0.05		0.08	0.02	0.02		0.01	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.9	xxxx	xxxxx		9.7	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	121	xxxxx		xxxx	160	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	2.4	xxxxx		xxxxx	0.4	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	62.5	xxxxx		xxxxx	30.8	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	F	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	62.5				30.8				xxxxxx				xxxxxx			
ApproachLOS:	F				D				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Opening Year (2024) With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[23.7]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	30	0	20			7	2	11			10	703	54			39	590	8		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	30	0	20			7	2	11			10	703	54			39	590	8		
Added Vol:	11	0	0			0	0	0			0	50	11			0	48	0		
PasserByVol:	0	0	0			-7	-2	9			-10	17	2			0	0	0		
Initial Fut:	41	0	20			0	0	20			0	770	67			39	638	8		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.99	0.99	0.99			0.99	0.99	0.99			0.99	0.99	0.99			0.99	0.99	0.99		
PHF Volume:	42	0	20			0	0	20			0	781	68			40	647	8		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	42	0	20			0	0	20			0	781	68			40	647	8		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1522	1516	781			1552	1576	647			xxxx	xxxx	xxxxx			849	xxxx	xxxxx		
Potent Cap.:	98	121	398			93	111	474			xxxx	xxxx	xxxxx			797	xxxx	xxxxx		
Move Cap.:	90	115	398			85	105	474			xxxx	xxxx	xxxxx			797	xxxx	xxxxx		
Total Cap:	216	238	xxxxx			197	217	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.19	0.00	0.05			0.00	0.00	0.04			xxxx	xxxx	xxxx			0.05	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.2	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.8	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			*	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		254	xxxxx		xxxx		474	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.9	xxxxx		xxxxx		0.1	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		23.7	xxxxx		xxxxx		12.9	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		B	*		*	*	*			*	*	*		
ApproachDel:	23.7					12.9					xxxxxx					xxxxxx				
ApproachLOS:	C					B					*					*				

Note: Queue reported is the number of cars per lane.

Horizon Year (2035) Without Project

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.385
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.8
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	20	9	72	25	65	0	10	285	34	223	230	20
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	20	9	72	25	65	0	10	285	34	223	230	20
Added Vol:	0	0	3	0	0	0	0	12	0	2	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	9	75	25	65	0	10	297	34	225	240	20
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95	
PHF Volume:	21	9	79	26	68	0	11	313	36	237	253	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	9	79	26	68	0	11	313	36	237	253	21
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	21	9	79	26	68	0	11	313	36	237	253	21
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900	1900		1900 1900	1900		1900 1900	1900	
Adjustment:	0.95 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00	
Lanes:	0.70 0.30	1.00		0.29 0.71	1.00		1.00 1.00	1.00		1.00 0.92	0.08	
Final Sat.:	1262 568	1900		520 1351	1900		1800 1900	1900		1800 1754	146	
Capacity Analysis Module:												
Vol/Sat:	0.02 0.02	0.04		0.05 0.05	0.00		0.01 0.16	0.02		0.13 0.14	0.14	
Crit Moves:				****			****			****		
Green/Cycle:	0.13 0.13	0.13		0.13 0.13	0.00		0.03 0.43	0.43		0.34 0.74	0.74	
Volume/Cap:	0.13 0.13	0.32		0.39 0.39	0.00		0.20 0.39	0.04		0.39 0.20	0.20	
Delay/Veh:	24.1 24.1	26.9		28.4 28.4	0.0		36.3 11.6	8.8		16.1 0.5	0.5	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	24.1 24.1	26.9		28.4 28.4	0.0		36.3 11.6	8.8		16.1 0.5	0.5	
LOS by Move:	C C	C		C C	A		D B	A		B A	A	
HCM2kAvgQ:	1 1	2		2 2	0		0 3	0		3 0	0	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.414
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	11.9
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	35	29	52	24	17	6	8	291	33	264	289	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	29	52	24	17	6	8	291	33	264	289	33
Added Vol:	0	0	5	0	0	0	0	32	0	5	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	29	57	24	17	6	8	323	33	269	323	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	37	31	60	25	18	6	8	340	35	283	340	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	31	60	25	18	6	8	340	35	283	340	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	31	60	25	18	6	8	340	35	283	340	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.56	0.44	1.00	0.60	0.40	1.00	1.00	1.00	1.00	1.00	0.91	0.09
Final Sat.:	1008	836	1900	1077	763	1900	1800	1900	1900	1800	1724	176
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.03	0.02	0.02	0.00	0.00	0.18	0.02	0.16	0.20	0.20
Crit Moves:		****						****		****		
Green/Cycle:	0.09	0.09	0.09	0.09	0.09	0.09	0.02	0.43	0.43	0.38	0.79	0.79
Volume/Cap:	0.41	0.41	0.36	0.27	0.27	0.04	0.25	0.41	0.04	0.41	0.25	0.25
Delay/Veh:	33.5	33.5	31.6	29.5	29.5	25.4	45.8	11.7	8.6	14.4	0.4	0.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.5	33.5	31.6	29.5	29.5	25.4	45.8	11.7	8.6	14.4	0.4	0.4
LOS by Move:	C	C	C	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	2	2	1	1	1	0	0	4	0	4	0	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[19.0]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0 0 1	0	1	0 2	0 1				1	0 2	0 1			
Volume Module:																		
Base Vol:	40	5	46	16	4	19	19	331	39				28	445	36			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	40	5	46	16	4	19	19	331	39				28	445	36			
Added Vol:	0	0	0	0	0	0	0	15	0				0	12	0			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	40	5	46	16	4	19	19	346	39				28	457	36			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81			
PHF Volume:	49	6	56	20	5	23	23	425	48				34	561	44			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	49	6	56	20	5	23	23	425	48				34	561	44			
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	824	1146	212	892	1150	281	606	xxxx	xxxxx				473	xxxx	xxxxx			
Potent Cap.:	269	201	799	240	200	723	982	xxxx	xxxxx				1100	xxxx	xxxxx			
Move Cap.:	244	190	799	208	189	723	982	xxxx	xxxxx				1100	xxxx	xxxxx			
Volume/Cap:	0.20	0.03	0.07	0.09	0.03	0.03	0.02	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	24.1	xxxx	xxxxx	8.8	xxxx	xxxxx				8.4	xxxx	xxxxx			
LOS by Move:	*	*	*	C	*	*	A	*	*				A	*	*			
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT				LT	- LTR	- RT			
Shared Cap.:	xxxx	368	xxxxx	xxxx	xxxx	485	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	1.3	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	19.0	xxxxx	xxxxx	xxxx	12.9	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	C	*	*	*	B	*	*	*				*	*	*			
ApproachDel:	19.0			17.5			xxxxxx						xxxxxx					
ApproachLOS:	C			C			*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[18.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	40	5	46	16	4	19	19	331	39	28	445	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	5	46	16	4	19	19	331	39	28	445	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	49	6	56	20	5	23	23	407	48	34	547	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	49	6	56	20	5	23	23	407	48	34	547	44
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	798	1113	203	868	1116	273	591	xxxx	xxxxx	454	xxxx	xxxxx
Potent Cap.:	281	210	810	250	209	730	995	xxxx	xxxxx	1117	xxxx	xxxxx
Move Cap.:	256	199	810	217	198	730	995	xxxx	xxxxx	1117	xxxx	xxxxx
Volume/Cap:	0.19	0.03	0.07	0.09	0.02	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	23.2	xxxx	xxxxx	8.7	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	382	xxxxx	xxxx	xxxx	498	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.2	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	18.3	xxxxx	xxxxx	xxxx	12.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	18.3			17.0			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 9.3 Worst Case Level Of Service: E[47.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		1	0	0	1	0		1	0	2	0	1		1	0	2	0	1	
Volume Module:																								
Base Vol:	90	28	84	30	39	32	32	276	40	57	498	101												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	90	28	84	30	39	32	32	276	40	57	498	101												
Added Vol:	0	0	0	0	0	0	0	36	0	0	39	0												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	90	28	84	30	39	32	32	312	40	57	537	101												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95												
PHF Volume:	95	30	89	32	41	34	34	329	42	60	567	107												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
FinalVolume:	95	30	89	32	41	34	34	329	42	60	567	107												
Critical Gap Module:																								
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	822	1191	165	935	1127	284	674	xxxx	xxxxx	372	xxxx	xxxxx												
Potent Cap.:	270	189	857	223	206	719	927	xxxx	xxxxx	1198	xxxx	xxxxx												
Move Cap.:	200	173	857	163	189	719	927	xxxx	xxxxx	1198	xxxx	xxxxx												
Volume/Cap:	0.47	0.17	0.10	0.19	0.22	0.05	0.04	xxxx	xxxx	0.05	xxxx	xxxx												
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx												
Control Del:	xxxxx	xxxx	xxxxx	32.3	xxxx	xxxxx	9.0	xxxx	xxxxx	8.2	xxxx	xxxxx												
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		285	xxxxx		xxxx	xxxx		283	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx		5.5	xxxxx		xxxxx	xxxx		1.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx		47.4	xxxxx		xxxxx	xxxx		22.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*		E	*		*	*		C	*	*	*	*	*	*									
ApproachDel:	47.4			25.3			xxxxxx			xxxxxx														
ApproachLOS:	E			D			*			*														

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[10.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	1 0	0	1 0	1 0	2	0	1	1 0	2	0	1
Volume Module:														
Base Vol:	90	28	84	30	39	32	32	276	40		57	498	101	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	28	84	30	39	32	32	276	40		57	498	101	
Added Vol:	0	0	0	0	0	0	0	36	0		0	39	0	
PasserByVol:	-90	-28	90	-30	-39	0	0	0	0		0	90	0	
Initial Fut:	0	0	174	0	0	32	32	312	40		57	627	101	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	0	184	0	0	34	34	329	42		60	662	107	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	0	0	184	0	0	34	34	329	42		60	662	107	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	849	1286	165	1015	1222	331	769	xxxx	xxxxx		372	xxxx	xxxxx	
Potent Cap.:	258	166	857	195	181	671	854	xxxx	xxxxx		1198	xxxx	xxxxx	
Move Cap.:	228	151	857	143	165	671	854	xxxx	xxxxx		1198	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.21	0.00	0.00	0.05	0.04	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx		8.2	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	857	xxxxx	xxxx	xxxx	671	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.3	xxxxx	xxxxx	xxxx	10.7	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	*	B	*	*	*		*	*	*	
ApproachDel:	10.3			10.7			xxxxxx				xxxxxx			
ApproachLOS:	B			B			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.407
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 33.2
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32	32		10	31	31		10	32	32		10	31	31	
Lanes:	1 0	2 0	1		1 0	2 0	1		1 0	2 0	1		1 0	1 1	0	
Volume Module:																
Base Vol:	74	124	136		126	124	99		53	297	55		241	432	43	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	74	124	136		126	124	99		53	297	55		241	432	43	
Added Vol:	0	8	3		2	6	10		12	3	0		2	2	1	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	74	132	139		128	130	109		65	300	55		243	434	44	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	78	139	146		135	137	115		68	316	58		256	457	46	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	78	139	146		135	137	115		68	316	58		256	457	46	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	78	139	146		135	137	115		68	316	58		256	457	46	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		1.00	1.82	0.18	
Final Sat.:	1800	3800	1900		1800	3800	1900		1800	3800	1900		1800	3450	350	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.04	0.08		0.07	0.04	0.06		0.04	0.08	0.03		0.14	0.13	0.13	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.10	0.29	0.29		0.12	0.31	0.31		0.13	0.29	0.29		0.23	0.39	0.39	
Volume/Cap:	0.43	0.13	0.26		0.63	0.12	0.19		0.30	0.29	0.10		0.63	0.34	0.34	
Delay/Veh:	54.0	28.7	30.9		59.3	26.8	28.0		47.0	30.6	28.7		45.5	21.9	21.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	54.0	28.7	30.9		59.3	26.8	28.0		47.0	30.6	28.7		45.5	21.9	21.9	
LOS by Move:	D	C	C		E	C	C		D	C	C		D	C	C	
HCM2kAvgQ:	3	2	3		6	1	2		2	4	1		9	5	5	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.328
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	22.1
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	74	124	136	126	124	99	53	297	55	241	432	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	124	136	126	124	99	53	297	55	241	432	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	78	131	143	133	131	104	56	313	58	254	455	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	131	143	133	131	104	56	313	58	254	455	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	131	143	133	131	104	56	313	58	254	455	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.82	0.18
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	3456	344
Capacity Analysis Module:												
Vol/Sat:	0.04	0.03	0.08	0.07	0.03	0.05	0.03	0.08	0.03	0.14	0.13	0.13
Crit Moves:			****					****		****		
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.14	0.36	0.36	0.20	0.42	0.42
Volume/Cap:	0.12	0.10	0.21	0.21	0.10	0.15	0.23	0.23	0.09	0.70	0.31	0.31
Delay/Veh:	18.7	18.3	19.7	19.7	18.3	19.0	36.9	19.5	18.3	44.5	15.7	15.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.7	18.3	19.7	19.7	18.3	19.0	36.9	19.5	18.3	44.5	15.7	15.7
LOS by Move:	B	B	B	B	B	B	D	B	B	D	B	B
HCM2kAvgQ:	1	1	2	2	1	2	2	3	1	8	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	32.1
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	131	184	268	136	103	118	94	346	40	138	455	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	184	268	136	103	118	94	346	40	138	455	61
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	205	273	139	126	152	126	351	40	143	460	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	138	216	287	146	133	160	133	369	42	151	484	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	216	287	146	133	160	133	369	42	151	484	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	216	287	146	133	160	133	369	42	151	484	67
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	3336	464
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.15	0.08	0.03	0.08	0.07	0.10	0.02	0.08	0.15	0.15
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.14	0.35	0.35	0.11	0.32	0.32	0.14	0.35	0.35
Volume/Cap:	0.69	0.18	0.47	0.59	0.10	0.24	0.65	0.30	0.07	0.59	0.42	0.42
Delay/Veh:	60.1	24.1	29.0	50.3	21.1	23.0	57.8	25.5	23.1	49.8	24.3	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.1	24.1	29.0	50.3	21.1	23.0	57.8	25.5	23.1	49.8	24.3	24.3
LOS by Move:	E	C	C	D	C	C	E	C	C	D	C	C
HCM2kAvgQ:	6	2	7	5	1	3	5	4	1	5	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.2
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	131	184	268	136	103	118	94	346	40	138	455	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	184	268	136	103	118	94	346	40	138	455	61
Added Vol:	0	21	5	3	23	34	32	5	0	5	5	3
PasserByVol:	0	28	0	22	45	0	84	-22	-2	0	0	0
Initial Fut:	131	233	273	161	171	152	210	329	38	143	460	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	138	245	287	169	180	160	221	346	40	151	484	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	245	287	169	180	160	221	346	40	151	484	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	245	287	169	180	160	221	346	40	151	484	67
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	3336	464
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.15	0.09	0.05	0.08	0.12	0.09	0.02	0.08	0.15	0.15
Crit Moves:			****					****		****		
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.15	0.36	0.36	0.20	0.41	0.41
Volume/Cap:	0.21	0.18	0.42	0.26	0.13	0.24	0.84	0.26	0.06	0.42	0.36	0.36
Delay/Veh:	19.6	18.9	22.4	20.2	18.4	19.8	64.4	19.8	18.1	35.3	17.0	17.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.6	18.9	22.4	20.2	18.4	19.8	64.4	19.8	18.1	35.3	17.0	17.0
LOS by Move:	B	B	C	C	B	B	E	B	B	D	B	B
HCM2kAvgQ:	2	2	5	3	1	3	9	3	1	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	80	Critical Vol./Cap.(X):	0.315
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.9
Optimal Cycle:	60	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	72	306	152		27	301	89		36	51	32		97	93	28	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	72	306	152		27	301	89		36	51	32		97	93	28	
Added Vol:	0	11	0		0	9	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	72	317	152		27	310	89		36	51	32		97	93	28	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	76	334	160		28	326	94		38	54	34		102	98	29	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	76	334	160		28	326	94		38	54	34		102	98	29	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	76	334	160		28	326	94		38	54	34		102	98	29	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.43	0.57	1.00		0.46	0.42	0.12	
Final Sat.:	1800	1900	1900		1800	1900	1900		769	1089	1900		825	791	238	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.18	0.08		0.02	0.17	0.05		0.05	0.05	0.02		0.12	0.12	0.12	
Crit Moves:		****												****		
Green/Cycle:	0.56	0.56	0.56		0.56	0.56	0.56		0.39	0.39	0.39		0.39	0.39	0.39	
Volume/Cap:	0.08	0.32	0.15		0.03	0.31	0.09		0.13	0.13	0.05		0.32	0.32	0.32	
Delay/Veh:	5.6	7.1	6.0		5.4	7.1	5.7		14.4	14.4	13.7		16.3	16.3	16.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	5.6	7.1	6.0		5.4	7.1	5.7		14.4	14.4	13.7		16.3	16.3	16.3	
LOS by Move:	A	A	A		A	A	A		B	B	B		B	B	B	
HCM2kAvgQ:	1	3	1		0	3	1		1	1	0		3	3	3	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec): 125 Critical Vol./Cap.(X): 0.396
Loss Time (sec): 4 (Y+R=3.0 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	30	30		10	30	30		21	21	21		21	21	21	
Lanes:	1 0	1	0	1	1 0	1	0	1	0	1	0	0 1	0	0	1! 0	0
Volume Module:																
Base Vol:	62	510	238		20	122	111		38	42	22		56	53	43	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	62	510	238		20	122	111		38	42	22		56	53	43	
Added Vol:	0	26	0		0	27	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	62	536	238		20	149	111		38	42	22		56	53	43	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	65	564	251		21	157	117		40	44	23		59	56	45	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	65	564	251		21	157	117		40	44	23		59	56	45	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	65	564	251		21	157	117		40	44	23		59	56	45	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		0.49	0.51	1.00		0.38	0.34	0.28	
Final Sat.:	1800	1900	1900		1800	1900	1900		879	972	1900		686	649	527	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.30	0.13		0.01	0.08	0.06		0.05	0.05	0.01		0.09	0.09	0.09	
Crit Moves:		****												****		
Green/Cycle:	0.75	0.75	0.75		0.75	0.75	0.75		0.22	0.22	0.22		0.22	0.22	0.22	
Volume/Cap:	0.05	0.40	0.18		0.02	0.11	0.08		0.21	0.21	0.06		0.40	0.40	0.40	
Delay/Veh:	0.1	0.8	0.3		0.0	0.2	0.1		41.3	41.3	39.0		44.8	44.8	44.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.1	0.8	0.3		0.0	0.2	0.1		41.3	41.3	39.0		44.8	44.8	44.8	
LOS by Move:	A	A	A		A	A	A		D	D	D		D	D	D	
HCM2kAvgQ:	0	1	0		0	0	0		3	3	1		5	5	5	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[23.1]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	3	0	7			3	0	0			0	513	3			11	797	2		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	3	0	7			3	0	0			0	513	3			11	797	2		
Added Vol:	0	0	0			4	0	3			4	12	0			0	17	5		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	3	0	7			7	0	3			4	525	3			11	814	7		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.82	0.82	0.82			0.82	0.82	0.82			0.82	0.82	0.82			0.82	0.82	0.82		
PHF Volume:	4	0	9			9	0	4			5	642	4			13	996	9		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	4	0	9			9	0	4			5	642	4			13	996	9		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1681	1683	642			1681	1678	996			1004	xxxx	xxxxx			646	xxxx	xxxxx		
Potent Cap.:	76	95	478			76	96	299			698	xxxx	xxxxx			949	xxxx	xxxxx		
Move Cap.:	74	93	478			73	94	299			698	xxxx	xxxxx			949	xxxx	xxxxx		
Total Cap:	187	208	xxxxx			188	209	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.02	0.00	0.02			0.05	0.00	0.01			0.01	xxxx	xxxx			0.01	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.0	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			10.2	xxxx	xxxxx			8.8	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			B	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		325	xxxxx		xxxx		211	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.1	xxxxx		xxxxx		0.2	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		16.5	xxxxx		xxxxx		23.1	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		C	*		*	*	*			*	*	*		
ApproachDel:	16.5					23.1					xxxxxx					xxxxxx				
ApproachLOS:	C					C					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[20.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1 0	1	0 1
Volume Module:												
Base Vol:	3	0	7	3	0	0	0	513	3	11	797	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	7	3	0	0	0	513	3	11	797	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	4	0	9	4	0	0	0	628	4	13	975	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	0	9	4	0	0	0	628	4	13	975	2
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1632	1634	316	1316	xxxx	xxxxx	xxxx	xxxx	xxxxx	631	xxxx	xxxxx
Potent Cap.:	82	102	730	136	xxxx	xxxxx	xxxx	xxxx	xxxxx	961	xxxx	xxxxx
Move Cap.:	81	101	730	133	xxxx	xxxxx	xxxx	xxxx	xxxxx	961	xxxx	xxxxx
Total Cap:	199	218	xxxxx	233	216	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	0.00	0.01	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	20.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	405	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	14.2			20.7			xxxxxx			xxxxxx		
ApproachLOS:	B			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: C[22.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	12	0	8				7	0	3				6	815	3				17	605	4			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	12	0	8				7	0	3				6	815	3				17	605	4			
Added Vol:	0	0	0				8	0	6				6	40	0				0	38	8			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	12	0	8				15	0	9				12	855	3				17	643	12			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94				0.94	0.94	0.94			
PHF Volume:	13	0	9				16	0	10				13	913	3				18	686	13			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	13	0	9				16	0	10				13	913	3				18	686	13			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1672	1674	913				1667	1664	686				699	xxxx	xxxxx				916	xxxx	xxxxx			
Potent Cap.:	77	97	334				78	98	451				907	xxxx	xxxxx				753	xxxx	xxxxx			
Move Cap.:	73	93	334				73	94	451				907	xxxx	xxxxx				753	xxxx	xxxxx			
Total Cap:	191	211	xxxxx				186	209	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.07	0.00	0.03				0.09	0.00	0.02				0.01	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.0	xxxx	xxxxx				9.9	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		230	xxxxx			xxxx		239	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.3	xxxxx			xxxxx		0.4	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		22.2	xxxxx			xxxxx		21.9	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		C	*			*		C	*			*	*	*				*	*	*			
ApproachDel:	22.2						21.9						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1 0	1	0 1
Volume Module:												
Base Vol:	12	0	8	7	0	3	6	815	3	17	605	4
Growth Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00
Initial Bse:	12	0	8	7	0	3	6	815	3	17	605	4
Added Vol:	0	0	0	8	0	6	6	40	0	0	38	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	0	8	15	0	9	12	855	3	17	643	12
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00
PHF Adj:	0.94 0.94	0.94	0.94	0.94 0.94	0.94	0.94	0.94 0.94	0.94	0.94	0.94 0.94	0.94	0.94
PHF Volume:	13	0	9	16	0	10	13	913	3	18	686	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	0	9	16	0	10	13	913	3	18	686	13
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1674	1675	458	1205	1664	686	699	xxxx	xxxxx	916	xxxx	xxxxx
Potent Cap.:	77	96	607	162	98	451	907	xxxx	xxxxx	753	xxxx	xxxxx
Move Cap.:	73	93	607	155	94	451	907	xxxx	xxxxx	753	xxxx	xxxxx
Total Cap:	191	211	xxxxx	281	209	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	0.00	0.01	0.06	0.00	0.02	0.01	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	9.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx	263	xxxxx	xxxx	327	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.9	xxxxx	xxxxx	16.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	19.9			16.9			xxxxx			xxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: E[40.7]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1	1 0	0	1	0
Volume Module:														
Base Vol:	12	2	36	19	7	34	23	426	38		35	693	25	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	12	2	36	19	7	34	23	426	38		35	693	25	
Added Vol:	3	0	0	0	0	0	0	14	2		0	19	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	15	2	36	19	7	34	23	440	40		35	712	25	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	17	2	41	21	8	38	26	496	45		39	802	28	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	17	2	41	21	8	38	26	496	45		39	802	28	
Critical Gap Module:														
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1466	1457	496	1487	1488	817	831	xxxx	xxxxx		541	xxxx	xxxxx	
Potent Cap.:	107	131	578	104	125	380	810	xxxx	xxxxx		1038	xxxx	xxxxx	
Move Cap.:	87	122	578	90	117	380	810	xxxx	xxxxx		1038	xxxx	xxxxx	
Volume/Cap:	0.20	0.02	0.07	0.24	0.07	0.10	0.03	xxxx	xxxx		0.04	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx		8.6	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	210	xxxxx	xxxx	166	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	28.8	xxxxx	xxxxx	40.7	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	D	*	*	E	*	*	*	*		*	*	*	
ApproachDel:	28.8			40.7			xxxxxx				xxxxxx			
ApproachLOS:	D			E			*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.444
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	14.1
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:												
Base Vol:	12	2	36	19	7	34	23	426	38	35	693	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	2	36	19	7	34	23	426	38	35	693	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	13	2	38	20	7	36	24	448	40	37	729	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	2	38	20	7	36	24	448	40	37	729	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	2	38	20	7	36	24	448	40	37	729	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.05	0.95	1.00	0.17	0.83	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	100	1800	1800	324	1576	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.24	0.02	0.02	0.38	0.01
Crit Moves:					****		****				****	
Green/Cycle:	0.17	0.17	0.17	0.17	0.17	0.17	0.09	0.59	0.59	0.18	0.68	0.68
Volume/Cap:	0.04	0.12	0.12	0.06	0.13	0.13	0.15	0.40	0.04	0.11	0.56	0.02
Delay/Veh:	38.0	38.6	38.6	38.2	38.7	38.7	46.5	12.4	9.5	37.5	9.6	5.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.0	38.6	38.6	38.2	38.7	38.7	46.5	12.4	9.5	37.5	9.6	5.7
LOS by Move:	D	D	D	D	D	D	D	B	A	D	A	A
HCM2kAvgQ:	0	1	1	1	1	1	1	8	1	1	13	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 10.2 Worst Case Level Of Service: F[113.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	41	0	50				32	0	28				58	678	23				37	594	32			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	41	0	50				32	0	28				58	678	23				37	594	32			
Added Vol:	5	0	0				0	0	0				0	43	5				0	41	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	46	0	50				32	0	28				58	721	28				37	635	32			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	48	0	53				34	0	29				61	759	29				39	668	34			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	48	0	53				34	0	29				61	759	29				39	668	34			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1659	1661	759				1685	1673	685				702	xxxx	xxxxx				788	xxxx	xxxxx			
Potent Cap.:	79	98	410				75	97	451				905	xxxx	xxxxx				840	xxxx	xxxxx			
Move Cap.:	67	87	410				60	86	451				905	xxxx	xxxxx				840	xxxx	xxxxx			
Volume/Cap:	0.72	0.00	0.13				0.56	0.00	0.07				0.07	xxxx	xxxx				0.05	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.3	xxxx	xxxxx				9.5	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		119	xxxxx			xxxx		101	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		5.1	xxxxx			xxxxx		3.0	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		114	xxxxx			xxxxx		87.3	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		F	*			*	*	*				*	*	*			
ApproachDel:	113.7						87.3						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.492
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	19.6
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	19	19	19		19	19	19		10	32	32		10	32	32	
Lanes:	1 0	0	1	0	1 0	0	1	0	1 0	1	0	1	1 0	1	0	1
Volume Module:																
Base Vol:	41	0	50		32	0	28		58	678	23		37	594	32	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	0	50		32	0	28		58	678	23		37	594	32	
Added Vol:	5	0	0		0	0	0		0	43	5		0	41	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	46	0	50		32	0	28		58	721	28		37	635	32	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	48	0	53		34	0	29		61	759	29		39	668	34	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	48	0	53		34	0	29		61	759	29		39	668	34	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	48	0	53		34	0	29		61	759	29		39	668	34	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Lanes:	1.00	0.00	1.00		1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat.:	1800	0	1900		1800	0	1900		1800	1900	1900		1800	1900	1900	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.00	0.03		0.02	0.00	0.02		0.03	0.40	0.02		0.02	0.35	0.02	
Crit Moves:	****									****			****			
Green/Cycle:	0.28	0.00	0.28		0.28	0.00	0.28		0.15	0.48	0.48		0.15	0.48	0.48	
Volume/Cap:	0.09	0.00	0.10		0.07	0.00	0.05		0.23	0.84	0.03		0.14	0.74	0.04	
Delay/Veh:	17.8	0.0	17.8		17.6	0.0	17.5		25.5	22.1	9.3		25.0	17.3	9.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.8	0.0	17.8		17.6	0.0	17.5		25.5	22.1	9.3		25.0	17.3	9.3	
LOS by Move:	B	A	B		B	A	B		C	C	A		C	B	A	
HCM2kAvgQ:	1	0	1		1	0	0		1	16	0		1	13	0	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.377
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 27.9
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	12	17	209	74	43	144	46	379	9	119	574	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	17	209	74	43	144	46	379	9	119	574	37
Added Vol:	3	0	0	0	0	4	3	9	2	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	17	209	74	43	148	49	388	11	119	585	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	16	18	220	78	45	156	52	408	12	125	616	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	18	220	78	45	156	52	408	12	125	616	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	18	220	78	45	156	52	408	12	125	616	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1800	1900	1900	1800	1900	1900	1800	3800	1900	1800	3800	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.12	0.04	0.02	0.08	0.03	0.11	0.01	0.07	0.16	0.02
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.30	0.30	0.11	0.31	0.31	0.09	0.41	0.41	0.10	0.42	0.42
Volume/Cap:	0.08	0.03	0.38	0.38	0.08	0.27	0.32	0.26	0.01	0.68	0.38	0.05
Delay/Veh:	44.8	26.8	31.8	50.7	27.0	29.5	51.8	19.3	17.0	65.9	19.8	16.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.8	26.8	31.8	50.7	27.0	29.5	51.8	19.3	17.0	65.9	19.8	16.4
LOS by Move:	D	C	C	D	C	C	D	B	B	E	B	B
HCM2kAvgQ:	1	0	5	3	1	4	2	4	0	6	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	26.9
Optimal Cycle:	96	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	20	64	213	64	35	62	165	561	16	93	490	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	64	213	64	35	62	165	561	16	93	490	71
Added Vol:	7	0	0	0	0	8	9	27	7	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	64	213	64	35	70	174	588	23	93	516	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	28	67	224	67	37	74	183	619	24	98	543	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	67	224	67	37	74	183	619	24	98	543	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	67	224	67	37	74	183	619	24	98	543	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1800	1900	1900	1800	1900	1900	1800	3800	1900	1800	3800	1900
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.12	0.04	0.02	0.04	0.10	0.16	0.01	0.05	0.14	0.04
Crit Moves:			****	****			****				****	
Green/Cycle:	0.10	0.28	0.28	0.10	0.28	0.28	0.14	0.43	0.43	0.11	0.40	0.40
Volume/Cap:	0.16	0.13	0.42	0.37	0.07	0.14	0.73	0.38	0.03	0.50	0.36	0.10
Delay/Veh:	43.0	27.4	31.8	47.9	26.7	27.5	57.9	17.2	14.1	51.1	19.4	17.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.0	27.4	31.8	47.9	26.7	27.5	57.9	17.2	14.1	51.1	19.4	17.0
LOS by Move:	D	C	C	D	C	C	E	B	B	D	B	B
HCM2kAvgQ:	1	1	5	2	1	2	7	5	0	4	5	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: F[66.0]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	31	3	41			7	2	7			5	642	20			19	690	9		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	31	3	41			7	2	7			5	642	20			19	690	9		
Added Vol:	0	0	0			0	0	0			0	9	0			0	11	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	31	3	41			7	2	7			5	651	20			19	701	9		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.86	0.86	0.86			0.86	0.86	0.86			0.86	0.86	0.86			0.86	0.86	0.86		
PHF Volume:	36	3	48			8	2	8			6	756	23			22	814	10		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	36	3	48			8	2	8			6	756	23			22	814	10		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1636	1636	756			1663	1649	814			825	xxxx	xxxxx			779	xxxx	xxxxx		
Potent Cap.:	82	102	411			78	100	381			814	xxxx	xxxxx			847	xxxx	xxxxx		
Move Cap.:	76	98	411			65	97	381			814	xxxx	xxxxx			847	xxxx	xxxxx		
Volume/Cap:	0.47	0.04	0.12			0.12	0.02	0.02			0.01	xxxx	xxxx			0.03	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.5	xxxx	xxxxx			9.4	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		140	xxxxx		xxxx		110	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		3.3	xxxxx		xxxxx		0.6	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		66.0	xxxxx		xxxxx		44.4	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*		F	*		*		E	*		*	*	*			*	*	*		
ApproachDel:	66.0					44.4					xxxxxx					xxxxxx				
ApproachLOS:	F					E					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[17.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		0	1 0	1 0		1	0 1	1 0	
Volume Module:																
Base Vol:	31	3	41		7	2	7		5	642	20		19	690	9	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	31	3	41		7	2	7		5	642	20		19	690	9	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86	
PHF Volume:	36	3	48		8	2	8		6	746	23		22	801	10	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	36	3	48		8	2	8		6	746	23		22	801	10	
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1215	1625	384		1237	1631	406		812	xxxx	xxxxx		769	xxxx	xxxxx	
Potent Cap.:	139	103	620		134	103	600		823	xxxx	xxxxx		854	xxxx	xxxxx	
Move Cap.:	132	100	620		118	99	600		823	xxxx	xxxxx		854	xxxx	xxxxx	
Total Cap:	254	221	xxxxx		231	217	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.14	0.02	0.08		0.04	0.01	0.01		0.01	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.4	xxxx	xxxxx		9.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	372	xxxxx		xxxx	312	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.9	xxxxx		xxxxx	0.2	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	17.6	xxxxx		xxxxx	17.3	xxxxx		9.4	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	C	*		A	*	*		*	*	*	
ApproachDel:		17.6				17.3				xxxxxx				xxxxxx		
ApproachLOS:		C				C				*				*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: E[48.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	31		1		33		7		2		11		12		723		58		42		619		8	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	31		1		33		7		2		11		12		723		58		42		619		8	
Added Vol:	0		0		0		0		0		0		0		27		0		0		26		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	31		1		33		7		2		11		12		750		58		42		645		8	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99		0.99	
PHF Volume:	31		1		33		7		2		11		12		761		59		43		655		8	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	31		1		33		7		2		11		12		761		59		43		655		8	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1536		1533		761		1572		1584		655		663		xxxx		xxxxx		820		xxxx		xxxxx	
Potent Cap.:	96		118		409		90		110		470		936		xxxx		xxxxx		818		xxxx		xxxxx	
Move Cap.:	88		110		409		78		102		470		936		xxxx		xxxxx		818		xxxx		xxxxx	
Volume/Cap:	0.36		0.01		0.08		0.09		0.02		0.02		0.01		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		0.2		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.9		xxxx		xxxxx		9.6		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		146		xxxxx		xxxx		151		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		2.0		xxxxx		xxxxx		0.5		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		48.3		xxxxx		xxxxx		32.5		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		E		*		*		D		*		*		*		*		*		*		*	
ApproachDel:	48.3						32.5						xxxxxx						xxxxxx					
ApproachLOS:	E						D						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 Without Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[17.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 1	0	1	0	1	0	1	1 0
Volume Module:														
Base Vol:	31	1	33	7	2	11	12	723	58		42	619		8
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	31	1	33	7	2	11	12	723	58		42	619		8
Added Vol:	0	0	0	0	0	0	0	27	0		0	26		0
PasserByVol:	0	-1	1	-7	-2	9	-12	19	2		0	0		0
Initial Fut:	31	0	34	0	0	20	0	769	60		42	645		8
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.99 0.99	0.99		0.99 0.99	0.99		0.99 0.99	0.99	0.99		0.99	0.99		0.99
PHF Volume:	31	0	35	0	0	20	0	780	61		43	655		8
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0		0
FinalVolume:	31	0	35	0	0	20	0	780	61		43	655		8
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	1223	1559	421	1134	1585	331	xxxx	xxxx	xxxxx		841	xxxx	xxxxx	
Potent Cap.:	138	114	587	160	109	670	xxxx	xxxx	xxxxx		803	xxxx	xxxxx	
Move Cap.:	128	107	587	144	104	670	xxxx	xxxx	xxxxx		803	xxxx	xxxxx	
Total Cap:	247	231	xxxxx	257	215	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.13 0.00	0.06		0.00 0.00	0.03		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.7	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	354	xxxxx	xxxx	670	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	17.5	xxxxx	xxxxx	10.5	xxxxx	9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*	*	B	*	A	*	*		*	*	*	
ApproachDel:	17.5			10.5			xxxxxx				xxxxxx			
ApproachLOS:	C			B			*				*			

Note: Queue reported is the number of cars per lane.

Horizon Year (2035) With Project

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.389
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	13.1
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	20	9	72	25	65	0	10	285	34	223	230	20
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	20	9	72	25	65	0	10	285	34	223	230	20
Added Vol:	0	0	11	0	0	0	0	12	0	8	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	9	83	25	65	0	10	297	34	231	240	20
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95	
PHF Volume:	21	9	87	26	68	0	11	313	36	243	253	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	9	87	26	68	0	11	313	36	243	253	21
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	21	9	87	26	68	0	11	313	36	243	253	21
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900	1900		1900 1900	1900		1900 1900	1900	
Adjustment:	0.95 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00	
Lanes:	0.70 0.30	1.00		0.29 0.71	1.00		1.00 1.00	1.00		1.00 0.92	0.08	
Final Sat.:	1262 568	1900		520 1351	1900		1800 1900	1900		1800 1754	146	
Capacity Analysis Module:												
Vol/Sat:	0.02 0.02	0.05		0.05 0.05	0.00		0.01 0.16	0.02		0.14 0.14	0.14	
Crit Moves:				****			****			****		
Green/Cycle:	0.13 0.13	0.13		0.13 0.13	0.00		0.03 0.42	0.42		0.35 0.74	0.74	
Volume/Cap:	0.13 0.13	0.35		0.39 0.39	0.00		0.19 0.39	0.04		0.39 0.19	0.19	
Delay/Veh:	24.2 24.2	27.7		28.5 28.5	0.0		36.3 11.8	9.0		15.8 0.5	0.5	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	24.2 24.2	27.7		28.5 28.5	0.0		36.3 11.8	9.0		15.8 0.5	0.5	
LOS by Move:	C C	C		C C	A		D B	A		B A	A	
HCM2kAvgQ:	1 1	2		2 2	0		0 4	0		3 0	0	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Beekley Road (NS) at Phelan Road (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.418
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	13.0
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	35	29	52	24	17	6	8	291	33	264	289	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	29	52	24	17	6	8	291	33	264	289	33
Added Vol:	0	0	16	0	0	0	0	32	0	16	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	29	68	24	17	6	8	323	33	280	323	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	37	31	72	25	18	6	8	340	35	295	340	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	31	72	25	18	6	8	340	35	295	340	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	31	72	25	18	6	8	340	35	295	340	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.56	0.44	1.00	0.60	0.40	1.00	1.00	1.00	1.00	1.00	0.91	0.09
Final Sat.:	1008	836	1900	1077	763	1900	1800	1900	1900	1800	1724	176
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.02	0.02	0.00	0.00	0.18	0.02	0.16	0.20	0.20
Crit Moves:		****						****		****		
Green/Cycle:	0.09	0.09	0.09	0.09	0.09	0.09	0.02	0.43	0.43	0.39	0.80	0.80
Volume/Cap:	0.42	0.42	0.43	0.27	0.27	0.04	0.25	0.42	0.04	0.42	0.25	0.25
Delay/Veh:	35.9	35.9	36.1	31.8	31.8	27.6	47.8	12.7	9.4	14.8	0.4	0.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.9	35.9	36.1	31.8	31.8	27.6	47.8	12.7	9.4	14.8	0.4	0.4
LOS by Move:	D	D	D	C	C	C	D	B	A	B	A	A
HCM2kAvgQ:	2	2	2	1	1	0	0	4	0	4	0	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: C[19.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	40	5	46	16	4	19	19	331	39	28	445	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	5	46	16	4	19	19	331	39	28	445	36
Added Vol:	0	0	0	8	0	0	0	31	0	0	24	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	5	46	24	4	19	19	362	39	28	469	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	49	6	56	29	5	23	23	445	48	34	576	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	49	6	56	29	5	23	23	445	48	34	576	52
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	851	1188	222	917	1184	288	628	xxxx	xxxxx	493	xxxx	xxxxx
Potent Cap.:	257	190	787	230	191	715	964	xxxx	xxxxx	1081	xxxx	xxxxx
Move Cap.:	233	179	787	199	180	715	964	xxxx	xxxxx	1081	xxxx	xxxxx
Volume/Cap:	0.21	0.03	0.07	0.15	0.03	0.03	0.02	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	26.2	xxxx	xxxxx	8.8	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	353	xxxxx	xxxx	xxxx	472	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.3	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.9	xxxxx	xxxxx	xxxx	13.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	B	*	*	*	*	*	*
ApproachDel:	19.9			19.8			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[15.2]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	40	5	46	16	4	19	19	331	39	28	445	36								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	40	5	46	16	4	19	19	331	39	28	445	36								
Added Vol:	0	0	0	8	0	0	0	31	0	0	24	6								
PasserByVol:	-40	-5	40	-16	-4	0	0	0	0	0	40	0								
Initial Fut:	0	0	86	8	0	19	19	362	39	28	509	42								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81								
PHF Volume:	0	0	106	10	0	23	23	445	48	34	625	52								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	106	10	0	23	23	445	48	34	625	52								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	873	1237	222	963	1233	313	677	xxxx	xxxxx	493	xxxx	xxxxx								
Potent Cap.:	248	177	787	213	178	689	924	xxxx	xxxxx	1081	xxxx	xxxxx								
Move Cap.:	229	168	787	177	168	689	924	xxxx	xxxxx	1081	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.13	0.06	0.00	0.03	0.03	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	26.6	xxxx	xxxxx	9.0	xxxx	xxxxx	8.4	xxxx	xxxxx								
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		787	xxxxx		xxxx	xxxx		689		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.5	xxxxx		xxxxx	xxxx		0.1		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		10.3	xxxxx		xxxxx	xxxx		10.4		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*	*		B		*	*	*			*	*	*		
ApproachDel:	10.3			15.2			xxxxxx			xxxxxx										
ApproachLOS:	B			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 10.7 Worst Case Level Of Service: F[57.1]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled					Uncontrolled				
Rights:	Include				Include				Include					Include				
Lanes:	0	0	1!	0 0	1	0	0	1 0	1	0	2	0	1	1	0	2	0	1
Volume Module:																		
Base Vol:	90	28	84		30	39	32		32	276	40			57	498	101		
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	90	28	84		30	39	32		32	276	40			57	498	101		
Added Vol:	0	0	0		11	0	0		0	59	0			0	61	11		
PasserByVol:	0	0	0		0	0	0		0	0	0			0	0	0		
Initial Fut:	90	28	84		41	39	32		32	335	40			57	559	112		
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	95	30	89		43	41	34		34	354	42			60	590	118		
Reduct Vol:	0	0	0		0	0	0		0	0	0			0	0	0		
FinalVolume:	95	30	89		43	41	34		34	354	42			60	590	118		
Critical Gap Module:																		
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																		
Cnflict Vol:	858	1250	177		970	1174	295		709	xxxx	xxxxx			396	xxxx	xxxxx		
Potent Cap.:	254	174	842		211	193	707		900	xxxx	xxxxx			1174	xxxx	xxxxx		
Move Cap.:	186	159	842		151	177	707		900	xxxx	xxxxx			1174	xxxx	xxxxx		
Volume/Cap:	0.51	0.19	0.11		0.29	0.23	0.05		0.04	xxxx	xxxx			0.05	xxxx	xxxx		
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx		1.1	xxxx	xxxxx		0.1	xxxx	xxxxx			0.2	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		38.1	xxxx	xxxxx		9.2	xxxx	xxxxx			8.2	xxxx	xxxxx		
LOS by Move:	*	*	*		E	*	*		A	*	*			A	*	*		
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		266	xxxxx	xxxx	xxxx		267	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		6.3	xxxxx	xxxxx	xxxx		1.1	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		57.1	xxxxx	xxxxx	xxxx		23.7	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		F	*	*	*		C	*	*	*			*	*	*		
ApproachDel:	57.1				29.0				xxxxxx					xxxxxx				
ApproachLOS:	F				D				*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Clovis Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[16.8]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	1	0	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:																				
Base Vol:	90	28	84	30	39	32	32	276	40	57	498	101								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	90	28	84	30	39	32	32	276	40	57	498	101								
Added Vol:	0	0	0	11	0	0	0	59	0	0	61	11								
PasserByVol:	-90	-28	90	-30	-39	0	0	0	0	0	90	0								
Initial Fut:	0	0	174	11	0	32	32	335	40	57	649	112								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	0	0	184	12	0	34	34	354	42	60	685	118								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	184	12	0	34	34	354	42	60	685	118								
Critical Gap Module:																				
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	884	1345	177	1050	1269	343	804	xxxx	xxxxx	396	xxxx	xxxxx								
Potent Cap.:	243	153	842	184	170	659	829	xxxx	xxxxx	1174	xxxx	xxxxx								
Move Cap.:	215	139	842	134	154	659	829	xxxx	xxxxx	1174	xxxx	xxxxx								
Volume/Cap:	0.00	0.00	0.22	0.09	0.00	0.05	0.04	xxxx	xxxx	0.05	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	34.4	xxxx	xxxxx	9.5	xxxx	xxxxx	8.2	xxxx	xxxxx								
LOS by Move:	*	*	*	D	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	842	xxxxx	xxxx	xxxx	659	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	10.5	xxxxx	xxxxx	xxxx	10.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	B	*	*	*	B	*	*	*	*	*	*								
ApproachDel:	10.5			16.8			xxxxxx			xxxxxx										
ApproachLOS:	B			C			*			*										

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.456
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 34.2
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	32		32	10	31		31	10	32		32	10	31		31
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	1	0
Volume Module:																
Base Vol:	74	124		136	126	124		99	53	297		55	241	432		43
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	74	124		136	126	124		99	53	297		55	241	432		43
Added Vol:	0	8		33	17	6		10	12	26		0	26	20		13
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	74	132		169	143	130		109	65	323		55	267	452		56
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95
PHF Volume:	78	139		178	151	137		115	68	340		58	281	476		59
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	78	139		178	151	137		115	68	340		58	281	476		59
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	78	139		178	151	137		115	68	340		58	281	476		59
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	1.00		1.00	0.95	1.00		1.00	0.95	1.00		1.00	0.95	1.00		1.00
Lanes:	1.00	2.00		1.00	1.00	2.00		1.00	1.00	2.00		1.00	1.00	1.78		0.22
Final Sat.:	1800	3800		1900	1800	3800		1900	1800	3800		1900	1800	3381		419
Capacity Analysis Module:																
Vol/Sat:	0.04	0.04		0.09	0.08	0.04		0.06	0.04	0.09		0.03	0.16	0.14		0.14
Crit Moves:				****	****					****			****			
Green/Cycle:	0.10	0.29		0.29	0.12	0.31		0.31	0.13	0.29		0.29	0.22	0.39		0.39
Volume/Cap:	0.43	0.13		0.32	0.69	0.12		0.19	0.30	0.31		0.10	0.69	0.36		0.36
Delay/Veh:	53.9	28.7		31.8	63.2	26.7		27.9	47.1	30.9		28.7	48.6	22.2		22.2
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	53.9	28.7		31.8	63.2	26.7		27.9	47.1	30.9		28.7	48.6	22.2		22.2
LOS by Move:	D	C		C	E	C		C	D	C		C	D	C		C
HCM2kAvgQ:	3	2		4	6	1		2	2	4		1	10	5		5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.367
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	23.7
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	74	124	136	126	124	99	53	297	55	241	432	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	124	136	126	124	99	53	297	55	241	432	43
Added Vol:	0	8	33	17	6	10	12	26	0	26	20	13
PasserByVol:	0	5	0	12	6	0	38	-12	-2	0	0	0
Initial Fut:	74	137	169	155	136	109	103	311	53	267	452	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	78	144	178	163	143	115	108	327	56	281	476	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	144	178	163	143	115	108	327	56	281	476	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	144	178	163	143	115	108	327	56	281	476	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.78	0.22
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	3381	419
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.09	0.09	0.04	0.06	0.06	0.09	0.03	0.16	0.14	0.14
Crit Moves:			****					****		****		
Green/Cycle:	0.34	0.34	0.34	0.34	0.34	0.34	0.14	0.34	0.34	0.24	0.44	0.44
Volume/Cap:	0.13	0.11	0.28	0.27	0.11	0.18	0.43	0.26	0.09	0.64	0.32	0.32
Delay/Veh:	21.3	20.9	23.1	23.0	20.9	21.9	42.4	22.3	20.8	39.5	15.4	15.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.3	20.9	23.1	23.0	20.9	21.9	42.4	22.3	20.8	39.5	15.4	15.4
LOS by Move:	C	C	C	C	C	C	D	C	C	D	B	B
HCM2kAvgQ:	1	1	3	3	1	2	3	3	1	8	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.530
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	33.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 2	0 1		1 0 1	1 0	
Volume Module:												
Base Vol:	131	184	268	136	103	118	94	346	40	138	455	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	184	268	136	103	118	94	346	40	138	455	61
Added Vol:	0	21	50	26	23	34	32	38	0	50	39	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	205	318	162	126	152	126	384	40	188	494	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	138	216	335	171	133	160	133	404	42	198	520	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	216	335	171	133	160	133	404	42	198	520	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	216	335	171	133	160	133	404	42	198	520	92
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.70	0.30
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	3231	569
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.18	0.09	0.03	0.08	0.07	0.11	0.02	0.11	0.16	0.16
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.32	0.32	0.13	0.34	0.34	0.11	0.32	0.32	0.15	0.36	0.36
Volume/Cap:	0.70	0.18	0.55	0.73	0.10	0.25	0.64	0.33	0.07	0.73	0.45	0.45
Delay/Veh:	61.5	24.1	30.8	60.1	21.7	23.6	56.7	25.8	23.1	56.5	24.3	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.5	24.1	30.8	60.1	21.7	23.6	56.7	25.8	23.1	56.5	24.3	24.3
LOS by Move:	E	C	C	E	C	C	E	C	C	E	C	C
HCM2kAvgQ:	6	2	8	7	1	3	5	4	1	8	6	6

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Sheep Creek Road (NS) at Phelan Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.427
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.8
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	32	32	10	31	31	10	32	32	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0
Volume Module:												
Base Vol:	131	184	268	136	103	118	94	346	40	138	455	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	184	268	136	103	118	94	346	40	138	455	61
Added Vol:	0	21	50	26	23	34	32	38	0	50	39	26
PasserByVol:	0	28	0	22	45	0	84	-22	-2	0	0	0
Initial Fut:	131	233	318	184	171	152	210	362	38	188	494	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	138	245	335	194	180	160	221	381	40	198	520	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	245	335	194	180	160	221	381	40	198	520	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	245	335	194	180	160	221	381	40	198	520	92
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.70	0.30
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	3231	569
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.18	0.11	0.05	0.08	0.12	0.10	0.02	0.11	0.16	0.16
Crit Moves:			****					****		****		
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.13	0.38	0.38	0.15	0.40	0.40
Volume/Cap:	0.20	0.17	0.47	0.29	0.13	0.22	0.92	0.27	0.06	0.72	0.41	0.41
Delay/Veh:	17.1	16.5	20.6	18.1	16.1	17.3	77.1	17.3	15.7	49.2	17.4	17.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.1	16.5	20.6	18.1	16.1	17.3	77.1	17.3	15.7	49.2	17.4	17.4
LOS by Move:	B	B	C	B	B	B	E	B	B	D	B	B
HCM2kAvgQ:	2	2	6	3	1	2	10	3	1	7	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.323
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.3
Optimal Cycle:	60	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0 1	0 1		1 0 1	0 1		0 1	0 0 1		0 0 1!	0 0	
Volume Module:												
Base Vol:	72	306	152	27	301	89	36	51	32	97	93	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	306	152	27	301	89	36	51	32	97	93	28
Added Vol:	0	26	0	0	20	12	15	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	332	152	27	321	101	51	51	32	97	93	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	76	349	160	28	338	106	54	54	34	102	98	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	349	160	28	338	106	54	54	34	102	98	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	349	160	28	338	106	54	54	34	102	98	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.49	1.00	0.46	0.42	0.12
Final Sat.:	1800	1900	1900	1800	1900	1900	924	924	1900	825	791	238
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.08	0.02	0.18	0.06	0.06	0.06	0.02	0.12	0.12	0.12
Crit Moves:		****									****	
Green/Cycle:	0.57	0.57	0.57	0.57	0.57	0.57	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.07	0.32	0.15	0.03	0.31	0.10	0.15	0.15	0.05	0.32	0.32	0.32
Delay/Veh:	5.4	7.0	5.8	5.2	6.9	5.5	16.1	16.1	15.1	18.0	18.0	18.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	7.0	5.8	5.2	6.9	5.5	16.1	16.1	15.1	18.0	18.0	18.0
LOS by Move:	A	A	A	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	3	1	0	3	1	2	2	0	4	4	4

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Sheep Creek Road(NS) at Nielson Road (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.409
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	30	10	30	30	21	21	21	21	21	21
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	62	510	238	20	122	111	38	42	22	56	53	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	510	238	20	122	111	38	42	22	56	53	43
Added Vol:	0	48	0	0	50	23	23	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	558	238	20	172	134	61	42	22	56	53	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	65	587	251	21	181	141	64	44	23	59	56	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	587	251	21	181	141	64	44	23	59	56	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	587	251	21	181	141	64	44	23	59	56	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.61	0.39	1.00	0.38	0.34	0.28
Final Sat.:	1800	1900	1900	1800	1900	1900	1089	750	1900	686	649	527
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.13	0.01	0.10	0.07	0.06	0.06	0.01	0.09	0.09	0.09
Crit Moves:		****									****	
Green/Cycle:	0.76	0.76	0.76	0.76	0.76	0.76	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.05	0.41	0.17	0.02	0.13	0.10	0.28	0.28	0.06	0.41	0.41	0.41
Delay/Veh:	0.1	0.9	0.3	0.0	0.2	0.1	41.6	41.6	38.2	44.1	44.1	44.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.1	0.9	0.3	0.0	0.2	0.1	41.6	41.6	38.2	44.1	44.1	44.1
LOS by Move:	A	A	A	A	A	A	D	D	D	D	D	D
HCM2kAvgQ:	0	1	0	0	0	0	3	3	1	5	5	5

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[26.0]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	3	0	7			3	0	0			0	513	3			11	797	2		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	3	0	7			3	0	0			0	513	3			11	797	2		
Added Vol:	6	0	12			4	0	3			4	58	23			8	64	5		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	9	0	19			7	0	3			4	571	26			19	861	7		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.82	0.82	0.82			0.82	0.82	0.82			0.82	0.82	0.82			0.82	0.82	0.82		
PHF Volume:	11	0	23			9	0	4			5	698	32			23	1053	9		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	11	0	23			9	0	4			5	698	32			23	1053	9		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2			7.1	6.5	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1814	1817	698			1835	1840	1053			1062	xxxx	xxxxx			730	xxxx	xxxxx		
Potent Cap.:	61	79	444			59	76	277			664	xxxx	xxxxx			883	xxxx	xxxxx		
Move Cap.:	59	76	444			55	74	277			664	xxxx	xxxxx			883	xxxx	xxxxx		
Total Cap:	165	187	xxxxx			160	184	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.07	0.00	0.05			0.05	0.00	0.01			0.01	xxxx	xxxx			0.03	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			10.5	xxxx	xxxxx			9.2	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			B	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		288	xxxxx		xxxx		184	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.4	xxxxx		xxxxx		0.2	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		19.2	xxxxx		xxxxx		26.0	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		C	*		*		D	*		*	*	*			*	*	*		
ApproachDel:		19.2					26.0				xxxxxx					xxxxxx				
ApproachLOS:		C					D				*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[22.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1 0	1	0 1
Volume Module:												
Base Vol:	3	0	7	3	0	0	0	513	3	11	797	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	7	3	0	0	0	513	3	11	797	2
Added Vol:	6	0	12	4	0	3	4	58	23	8	64	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	0	19	7	0	3	4	571	26	19	861	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	11	0	23	9	0	4	5	698	32	23	1053	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	0	23	9	0	4	5	698	32	23	1053	9
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1830	1832	365	1459	1840	1053	1062	xxxx	xxxxx	730	xxxx	xxxxx
Potent Cap.:	60	77	684	108	76	277	664	xxxx	xxxxx	883	xxxx	xxxxx
Move Cap.:	57	74	684	102	74	277	664	xxxx	xxxxx	883	xxxx	xxxxx
Total Cap:	164	185	xxxxx	199	184	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	0.00	0.03	0.04	0.00	0.01	0.01	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	9.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	339	xxxxx	xxxx	218	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	16.8	xxxxx	xxxxx	22.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	16.8			22.5			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: D[27.5]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	12	0	8	7	0	3	6	815	3	17	605	4								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	12	0	8	7	0	3	6	815	3	17	605	4								
Added Vol:	11	0	23	8	0	6	6	108	34	11	129	8								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	23	0	31	15	0	9	12	923	37	28	734	12								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94								
PHF Volume:	25	0	33	16	0	10	13	985	39	30	783	13								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	25	0	33	16	0	10	13	985	39	30	783	13								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1865	1867	985	1890	1893	783	796	xxxx	xxxxx	1025	xxxx	xxxxx								
Potent Cap.:	56	73	304	54	71	397	835	xxxx	xxxxx	685	xxxx	xxxxx								
Move Cap.:	52	69	304	46	67	397	835	xxxx	xxxxx	685	xxxx	xxxxx								
Total Cap:	162	182	xxxxx	140	172	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.15	0.00	0.11	0.11	0.00	0.02	0.02	xxxx	xxxx	0.04	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx	10.5	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	B	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		221	xxxxx		xxxx		185	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		1.0	xxxxx		xxxxx		0.5	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		26.9	xxxxx		xxxxx		27.5	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		D	*		*		D	*		*	*	*			*	*	*		
ApproachDel:		26.9					27.5				xxxxxx						xxxxxx			
ApproachLOS:		D					D				*						*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Sierra Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[21.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	1	0	1 0	1	1
Volume Module:												
Base Vol:	12	0	8	7	0	3	6	815	3	17	605	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	0	8	7	0	3	6	815	3	17	605	4
Added Vol:	11	0	23	8	0	6	6	108	34	11	129	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	0	31	15	0	9	12	923	37	28	734	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	25	0	33	16	0	10	13	985	39	30	783	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	0	33	16	0	10	13	985	39	30	783	13
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1885	1887	512	1361	1893	783	796	xxxx	xxxxx	1025	xxxx	xxxxx
Potent Cap.:	55	71	566	127	71	397	835	xxxx	xxxxx	685	xxxx	xxxxx
Move Cap.:	51	67	566	114	67	397	835	xxxx	xxxxx	685	xxxx	xxxxx
Total Cap:	159	180	xxxxx	233	172	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.15	0.00	0.06	0.07	0.00	0.02	0.02	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx	10.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	271	xxxxx	xxxx	275	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	21.8	xxxxx	xxxxx	19.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:		21.8			19.4		xxxxxx			xxxxxx		
ApproachLOS:		C			C		*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	450	0	0	730	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	450	0	0	730	0
Added Vol:	6	0	18	0	0	0	0	50	23	8	71	0
PasserByVol:	10	0	0	0	0	0	0	0	12	10	0	0
Initial Fut:	16	0	18	0	0	0	0	500	35	18	801	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	18	0	20	0	0	0	0	569	40	20	911	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	18	0	20	0	0	0	0	569	40	20	911	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1520	1520	569	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	608	xxxx	xxxxx
Potent Cap.:	132	120	526	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	980	xxxx	xxxxx
Move Cap.:	130	117	526	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	980	xxxx	xxxxx
Total Cap:	261	234	xxxxx	206	226	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	356	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	16.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		16.4		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[24.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	750	0	0	630	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	750	0	0	630	0
Added Vol:	11	0	34	0	0	0	0	104	34	11	137	0
PasserByVol:	31	0	3	0	0	0	0	0	29	19	0	0
Initial Fut:	42	0	37	0	0	0	0	854	63	30	767	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	44	0	39	0	0	0	0	903	67	32	811	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	0	39	0	0	0	0	903	67	32	811	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1778	1778	903	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	970	xxxx	xxxxx
Potent Cap.:	92	83	339	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	719	xxxx	xxxxx
Move Cap.:	89	80	339	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	719	xxxx	xxxxx
Total Cap:	221	199	xxxxx	151	182	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.20	0.00	0.12	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	264	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	24.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	24.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	450	0	0	730	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	450	0	0	730	0
Added Vol:	0	0	12	0	0	0	0	45	23	0	78	0
PasserByVol:	0	0	17	0	0	0	0	0	28	0	0	0
Initial Fut:	0	0	29	0	0	0	0	495	51	0	808	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	33	0	0	0	0	563	58	0	919	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	33	0	0	0	0	563	58	0	919	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	563	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	530	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	530	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	273	246	xxxxx	214	238	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	12.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	12.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Driveway (NS) at Phelan Road (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[18.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	750	0	0	630	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	750	0	0	630	0
Added Vol:	0	0	23	0	0	0	0	105	34	0	148	0
PasserByVol:	0	0	46	0	0	0	0	0	34	0	0	0
Initial Fut:	0	0	69	0	0	0	0	855	68	0	778	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	73	0	0	0	0	904	72	0	823	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	73	0	0	0	0	904	72	0	823	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	904	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	338	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	338	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	235	211	xxxxx	154	200	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.22	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.8	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	18.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	18.6			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 24.7 Worst Case Level Of Service: F[312.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	12		2		36		19		7		34		23		426		38		35		693		25	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	12		2		36		19		7		34		23		426		38		35		693		25	
Added Vol:	44		6		0		0		0		8		0		55		2		45		26		0	
PasserByVol:	0		3		0		0		3		0		0		0		15		15		0		0	
Initial Fut:	56		11		36		19		10		42		23		481		55		95		719		25	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89	
PHF Volume:	63		12		41		21		11		47		26		542		62		107		810		28	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	63		12		41		21		11		47		26		542		62		107		810		28	
Critical Gap Module:																								
Critical Gp:	7.1		6.5		6.2		7.1		6.5		6.2		4.1		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		3.5		4.0		3.3		2.2		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1662		1647		542		1690		1694		824		838		xxxx		xxxxx		604		xxxx		xxxxx	
Potent Cap.:	78		100		544		75		94		376		805		xxxx		xxxxx		984		xxxx		xxxxx	
Move Cap.:	55		87		544		55		81		376		805		xxxx		xxxxx		984		xxxx		xxxxx	
Volume/Cap:	1.15		0.14		0.07		0.39		0.14		0.13		0.03		xxxx		xxxx		0.11		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.1		xxxx		xxxxx		0.4		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.6		xxxx		xxxxx		9.1		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		85		xxxxx		xxxx		123		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		8.8		xxxxx		xxxxx		3.4		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		313		xxxxx		xxxxx		77.6		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		F		*		*		F		*		*		*		*		*		*		*	
ApproachDel:	312.7						77.6						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	6 (Y+R=3.0 sec)	Average Delay (sec/veh):	15.9
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	12	2	36	19	7	34	23	426	38	35	693	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	2	36	19	7	34	23	426	38	35	693	25
Added Vol:	44	6	0	0	0	8	0	55	2	45	26	0
PasserByVol:	0	3	0	0	3	0	0	0	15	15	0	0
Initial Fut:	56	11	36	19	10	42	23	481	55	95	719	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	59	12	38	20	11	44	24	506	58	100	757	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	12	38	20	11	44	24	506	58	100	757	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	12	38	20	11	44	24	506	58	100	757	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.23	0.77	1.00	0.19	0.81	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	445	1455	1800	365	1535	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.01	0.03	0.03	0.01	0.27	0.03	0.06	0.40	0.01
Crit Moves:					****		****				****	
Green/Cycle:	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.56	0.56	0.18	0.63	0.63
Volume/Cap:	0.16	0.13	0.13	0.06	0.14	0.14	0.13	0.47	0.05	0.32	0.63	0.02
Delay/Veh:	31.6	31.4	31.4	30.8	31.5	31.5	38.9	12.8	9.4	34.8	11.8	6.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.6	31.4	31.4	30.8	31.5	31.5	38.9	12.8	9.4	34.8	11.8	6.5
LOS by Move:	C	C	C	C	C	C	D	B	A	C	B	A
HCM2kAvgQ:	2	1	1	1	1	1	1	9	1	3	14	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 316.4 Worst Case Level Of Service: F[2347.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	41	0	50				32	0	28				58	678	23				37	594	32			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	41	0	50				32	0	28				58	678	23				37	594	32			
Added Vol:	84	11	0				0	0	11				0	123	5				68	52	0			
PasserByVol:	27	5	34				0	5	2				3	0	0				37	0	0			
Initial Fut:	152	16	84				32	5	41				61	801	28				142	646	32			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	160	17	88				34	5	43				64	843	29				149	680	34			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	160	17	88				34	5	43				64	843	29				149	680	34			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1991	1984	843				2034	1996	697				714	xxxx	xxxxx				872	xxxx	xxxxx			
Potent Cap.:	46	62	367				43	61	445				896	xxxx	xxxxx				782	xxxx	xxxxx			
Move Cap.:	31	47	367				19	46	445				896	xxxx	xxxxx				782	xxxx	xxxxx			
Volume/Cap:	5.22	0.36	0.24				1.76	0.12	0.10				0.07	xxxx	xxxx				0.19	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.2	xxxx	xxxxx				0.7	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.3	xxxx	xxxxx				10.7	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		46	xxxxx			xxxx		42	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		30.7	xxxxx			xxxxx		8.6	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx		2348	xxxxx			xxxxx		664	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		F	*			*	*	*				*	*	*			
ApproachDel:	2347.7						664.5						xxxxxx						xxxxxx					
ApproachLOS:	F						F						*						*					

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Valle Vista Road (NS) at Phelan Road (EW)

Cycle (sec):	125	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	19.7
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	32	32	10	32	32
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	41	0	50	32	0	28	58	678	23	37	594	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	0	50	32	0	28	58	678	23	37	594	32
Added Vol:	84	11	0	0	0	11	0	123	5	68	52	0
PasserByVol:	27	5	34	0	5	2	3	0	0	37	0	0
Initial Fut:	152	16	84	32	5	41	61	801	28	142	646	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	160	17	88	34	5	43	64	843	29	149	680	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	17	88	34	5	43	64	843	29	149	680	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	17	88	34	5	43	64	843	29	149	680	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.16	0.84	1.00	0.11	0.89	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	304	1596	1800	207	1693	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.06	0.06	0.02	0.03	0.03	0.04	0.44	0.02	0.08	0.36	0.02
Crit Moves:	****							****		****		
Green/Cycle:	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.67	0.67	0.13	0.65	0.65
Volume/Cap:	0.58	0.36	0.36	0.12	0.17	0.17	0.24	0.66	0.02	0.66	0.55	0.03
Delay/Veh:	58.2	51.1	51.1	46.7	47.4	47.4	49.4	6.9	2.4	66.1	6.7	3.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.2	51.1	51.1	46.7	47.4	47.4	49.4	6.9	2.4	66.1	6.7	3.3
LOS by Move:	E	D	D	D	D	D	D	A	A	E	A	A
HCM2kAvgQ:	7	4	4	1	2	2	2	9	0	7	7	0

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: B[10.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0	0	0	1	0	0	0	1! 0	0	0	0	0	0
Volume Module:																
Base Vol:	0	50	0	0	80	0	0		0	0		0	0	0		0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	50	0	0	80	0	0		0	0		0	0	0		0
Added Vol:	23	3	0	0	32	15	47		0	6		0	0	0		0
PasserByVol:	10	0	0	0	0	17	17		0	10		0	0	0		0
Initial Fut:	33	53	0	0	112	32	64		0	16		0	0	0		0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.81 0.81	0.81	0.81	0.81	0.81	0.81	0.81		0.81	0.81		0.81	0.81	0.81		0.81
PHF Volume:	41	66	0	0	138	40	79		0	20		0	0	0		0
Reduct Vol:	0	0	0	0	0	0	0		0	0		0	0	0		0
FinalVolume:	41	66	0	0	138	40	79		0	20		0	0	0		0
Critical Gap Module:																
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5		6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	178 xxxx	xxxxx	xxxx	xxxx	xxxxx	305	305		158	xxxx	xxxx	xxxxx				
Potent Cap.:	1410 xxxx	xxxxx	xxxx	xxxx	xxxxx	691	611		892	xxxx	xxxx	xxxxx				
Move Cap.:	1410 xxxx	xxxxx	xxxx	xxxx	xxxxx	675	593		892	xxxx	xxxx	xxxxx				
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00		0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*		*	*	*	*				
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT					
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	710	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	0.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.9	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			10.9			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 5.6 Worst Case Level Of Service: B[13.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0	0	0	1	0	0	0	1! 0	0	0	0	0	0
Volume Module:																
Base Vol:	0	90	0	0	60	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	90	0	0	60	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	34	5	0	0	50	23	91	0	11	0	0	0	0	0	0	0
PasserByVol:	18	0	0	0	0	22	58	0	6	0	0	0	0	0	0	0
Initial Fut:	52	95	0	0	110	45	149	0	17	0	0	0	0	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85 0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	61	112	0	0	129	53	175	0	20	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	61	112	0	0	129	53	175	0	20	0	0	0	0	0	0	0
Critical Gap Module:																
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																
Cnflict Vol:	182 xxxx	xxxxx	xxxx	xxxx	xxxxx	390	390	156	xxxx	xxxx	xxxxx					
Potent Cap.:	1405 xxxx	xxxxx	xxxx	xxxx	xxxxx	618	548	895	xxxx	xxxx	xxxxx					
Move Cap.:	1405 xxxx	xxxxx	xxxx	xxxx	xxxxx	597	524	895	xxxx	xxxx	xxxxx					
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx	xxxx	0.29	0.00	0.02	xxxx	xxxx	xxxx					
Level Of Service Module:																
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	7.7 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*					
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	618	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	0.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.4	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	7.7 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.5	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.5			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: A[8.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 0	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	50	0	0	80	0	0	0	0	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	50	0	0	80	0	0	0	0	0	0	0
Added Vol:	0	26	0	0	8	30	0	0	12	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	76	0	0	88	30	0	0	12	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81 0.81	0.81	0.81	0.81	0.81	0.81	0.81 0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	0	94	0	0	109	37	0	0	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	94	0	0	109	37	0	0	15	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	127	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	928	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	928	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.9	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.9			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Valle Vista Road (NS) at Project Driveway (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[9.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 0	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	90	0	0	60	0	0	0	0	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	90	0	0	60	0	0	0	0	0	0	0
Added Vol:	0	38	0	0	16	45	0	0	23	0	0	0
PasserByVol:	0	0	0	0	0	15	0	0	12	0	0	0
Initial Fut:	0	128	0	0	76	60	0	0	35	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85 0.85	0.85	0.85	0.85	0.85	0.85	0.85 0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	151	0	0	89	71	0	0	41	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	151	0	0	89	71	0	0	41	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	125	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	931	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	931	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.0	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.0			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	28.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	28	28	10	28	28	10	40	40	10	40	40
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	12	17	209	74	43	144	46	379	9	119	574	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	17	209	74	43	144	46	379	9	119	574	37
Added Vol:	11	0	0	0	0	27	21	26	8	0	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	17	209	74	43	171	67	405	17	119	608	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	24	18	220	78	45	180	71	426	18	125	640	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	18	220	78	45	180	71	426	18	125	640	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	18	220	78	45	180	71	426	18	125	640	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1800	1900	1900	1800	1900	1900	1800	3800	1900	1800	3800	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.12	0.04	0.02	0.09	0.04	0.11	0.01	0.07	0.17	0.02
Crit Moves:			****	****			****				****	
Green/Cycle:	0.11	0.29	0.29	0.11	0.30	0.30	0.10	0.42	0.42	0.11	0.43	0.43
Volume/Cap:	0.13	0.03	0.40	0.40	0.08	0.32	0.40	0.27	0.02	0.66	0.40	0.05
Delay/Veh:	45.9	27.6	32.9	51.4	27.9	31.2	52.9	18.6	16.3	64.2	19.6	16.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.9	27.6	32.9	51.4	27.9	31.2	52.9	18.6	16.3	64.2	19.6	16.1
LOS by Move:	D	C	C	D	C	C	D	B	B	E	B	B
HCM2kAvgQ:	1	0	5	3	1	4	3	4	0	5	6	1

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Johnson Road (NS) at Phelan Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.465
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 28.0
Optimal Cycle: 96 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	28	28		10	28	28		10	40	40		10	40	40	
Lanes:	1 0	1	0	1	1 0	1	0	1	1 0	2	0	1	1 0	2	0	1
Volume Module:																
Base Vol:	20	64	213		64	35	62		165	561	16		93	490	71	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	64	213		64	35	62		165	561	16		93	490	71	
Added Vol:	18	0	0		0	0	42		43	61	19		0	60	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	38	64	213		64	35	104		208	622	35		93	550	71	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	40	67	224		67	37	109		219	655	37		98	579	75	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	40	67	224		67	37	109		219	655	37		98	579	75	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	40	67	224		67	37	109		219	655	37		98	579	75	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00	
Final Sat.:	1800	1900	1900		1800	1900	1900		1800	3800	1900		1800	3800	1900	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.04	0.12		0.04	0.02	0.06		0.12	0.17	0.02		0.05	0.15	0.04	
Crit Moves:			****		****				****					****		
Green/Cycle:	0.10	0.27	0.27		0.10	0.27	0.27		0.18	0.45	0.45		0.11	0.38	0.38	
Volume/Cap:	0.23	0.13	0.44		0.39	0.07	0.22		0.67	0.38	0.04		0.48	0.40	0.10	
Delay/Veh:	47.1	29.8	34.8		51.3	29.1	30.9		50.7	16.7	13.7		51.8	22.5	19.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	47.1	29.8	34.8		51.3	29.1	30.9		50.7	16.7	13.7		51.8	22.5	19.4	
LOS by Move:	D	C	C		D	C	C		D	B	B		D	C	B	
HCM2kAvgQ:	1	1	6		3	1	3		8	6	0		4	6	1	

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: F[96.9]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	1	0	1	1	0	1	0	1
Volume Module:																				
Base Vol:	31	3	41	7	2	7	5	642	20	19	690	9								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	31	3	41	7	2	7	5	642	20	19	690	9								
Added Vol:	8	0	0	0	0	0	0	20	6	0	26	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	39	3	41	7	2	7	5	662	26	19	716	9								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86								
PHF Volume:	45	3	48	8	2	8	6	769	30	22	832	10								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	45	3	48	8	2	8	6	769	30	22	832	10								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1667	1667	769	1697	1686	832	842	xxxx	xxxxx	799	xxxx	xxxxx								
Potent Cap.:	78	98	404	74	95	372	802	xxxx	xxxxx	832	xxxx	xxxxx								
Move Cap.:	73	94	404	62	92	372	802	xxxx	xxxxx	832	xxxx	xxxxx								
Volume/Cap:	0.62	0.04	0.12	0.13	0.03	0.02	0.01	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx	9.4	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		124	xxxxx		xxxx		104	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		4.5	xxxxx		xxxxx		0.6	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		96.9	xxxxx		xxxxx		47.0	xxxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	*		F	*		*		E	*		*	*	*	*		*	*	*		
ApproachDel:	96.9					47.0					xxxxxx					xxxxxx				
ApproachLOS:	F					E					*					*				

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Morning Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[18.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		0	1 0	1 0		1	0 1	1 0	
Volume Module:																
Base Vol:	31	3	41		7	2	7		5	642	20		19	690	9	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	31	3	41		7	2	7		5	642	20		19	690	9	
Added Vol:	8	0	0		0	0	0		0	20	6		0	26	0	
PasserByVol:	0	-3	3		-7	-2	9		-5	12	2		0	0	0	
Initial Fut:	39	0	44		0	0	16		0	674	28		19	716	9	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86		0.86	0.86	0.86	
PHF Volume:	45	0	51		0	0	19		0	783	33		22	832	10	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	45	0	51		0	0	19		0	783	33		22	832	10	
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1259	1685	408		1272	1696	421		xxxx	xxxx	xxxxx		815	xxxx	xxxxx	
Potent Cap.:	129	95	599		127	94	587		xxxx	xxxx	xxxxx		821	xxxx	xxxxx	
Move Cap.:	123	92	599		113	91	587		xxxx	xxxx	xxxxx		821	xxxx	xxxxx	
Total Cap:	244	214	xxxxx		223	208	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.19	0.00	0.09		0.00	0.00	0.03		xxxx	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.5	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	356	xxxxx		xxxx	587	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	1.1	xxxxx		xxxxx	0.1	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	18.8	xxxxx		xxxxx	11.3	xxxxx		9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	B	*		A	*	*		*	*	*	
ApproachDel:	18.8				11.3				xxxxxx				xxxxxx			
ApproachLOS:	C				B				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: F[72.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 1! 0 0				0 0 1! 0 0				1 0 1 0 1				1 0 1 0 1			
Volume Module:																
Base Vol:	31	1	33		7	2	11		12	723	58		42	619	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	31	1	33		7	2	11		12	723	58		42	619	8	
Added Vol:	11	0	0		0	0	0		0	50	11		0	48	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	42	1	33		7	2	11		12	773	69		42	667	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	43	1	33		7	2	11		12	784	70		43	677	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	43	1	33		7	2	11		12	784	70		43	677	8	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1582	1579	784		1623	1641	677		685	xxxx	xxxxx		854	xxxx	xxxxx	
Potent Cap.:	89	110	396		83	101	456		918	xxxx	xxxxx		794	xxxx	xxxxx	
Move Cap.:	81	103	396		72	94	456		918	xxxx	xxxxx		794	xxxx	xxxxx	
Volume/Cap:	0.53	0.01	0.08		0.10	0.02	0.02		0.01	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.0	xxxx	xxxxx		9.8	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	124	xxxxx		xxxx	140	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	3.2	xxxxx		xxxxx	0.5	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	72.4	xxxxx		xxxxx	35.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	F	*		*	D	*		*	*	*		*	*	*	
ApproachDel:	72.4				35.0				xxxxxx				xxxxxx			
ApproachLOS:	F				D				*				*			

Note: Queue reported is the number of cars per lane.

VVR Commercial Development
Year 2035 With Project
Evening Peak Hour With Improvements

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Eaby Road (NS) at Phelan Road (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[19.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1! 0	0		0	0 1! 0	0		0	1 0	1 0		1	0 1	1 0	
Volume Module:																
Base Vol:	31	1	33		7	2	11		12	723	58		42	619	8	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	31	1	33		7	2	11		12	723	58		42	619	8	
Added Vol:	11	0	0		0	0	0		0	50	11		0	48	0	
PasserByVol:	0	-1	1		-7	-2	9		-12	19	2		0	0	0	
Initial Fut:	42	0	34		0	0	20		0	792	71		42	667	8	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	43	0	35		0	0	20		0	804	72		43	677	8	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	43	0	35		0	0	20		0	804	72		43	677	8	
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9		7.5	6.5	6.9		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1263	1610	438		1168	1642	343		xxxx	xxxx	xxxxx		876	xxxx	xxxxx	
Potent Cap.:	128	106	572		151	101	659		xxxx	xxxx	xxxxx		779	xxxx	xxxxx	
Move Cap.:	119	100	572		136	95	659		xxxx	xxxx	xxxxx		779	xxxx	xxxxx	
Total Cap:	237	222	xxxxx		248	206	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.18	0.00	0.06		0.00	0.00	0.03		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.9	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	321	xxxxx		xxxx	659	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.9	xxxxx		xxxxx	0.1	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	19.7	xxxxx		xxxxx	10.6	xxxxx		9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	B	*		A	*	*		*	*	*	
ApproachDel:	19.7				10.6				xxxxxx				xxxxxx			
ApproachLOS:	C				B				*				*			

Note: Queue reported is the number of cars per lane.

APPENDIX G

Traffic Signal Warrant Worksheets

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Existing

Major Street Name = **Phelan Road**

Total of Both Approaches (VPH) = **919**

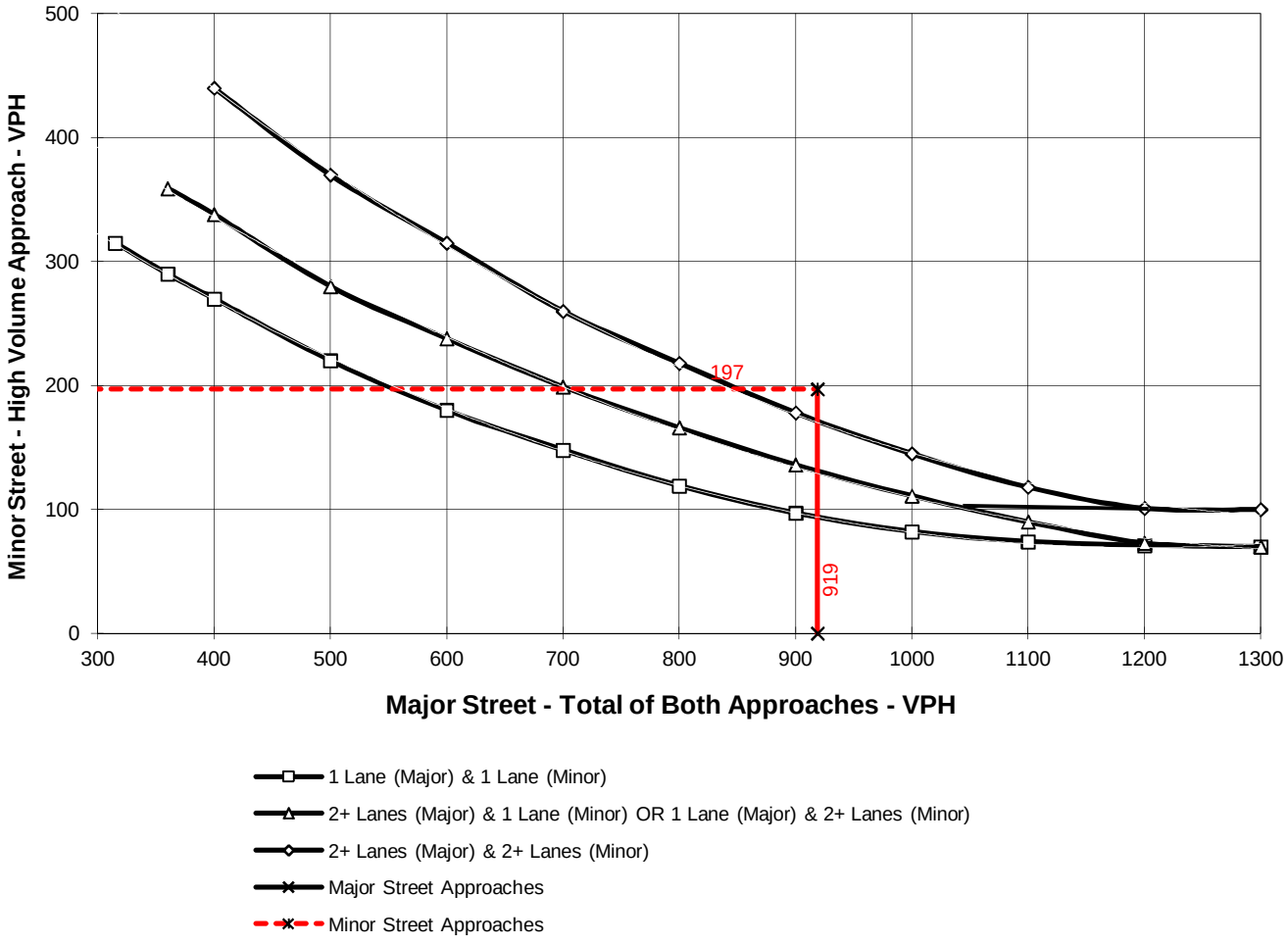
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Clovis Road**

High Volume Approach (VPH) = **197**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Opening Year (2019) With Project

Major Street Name = **Phelan Road**

Total of Both Approaches (VPH) = **1458**

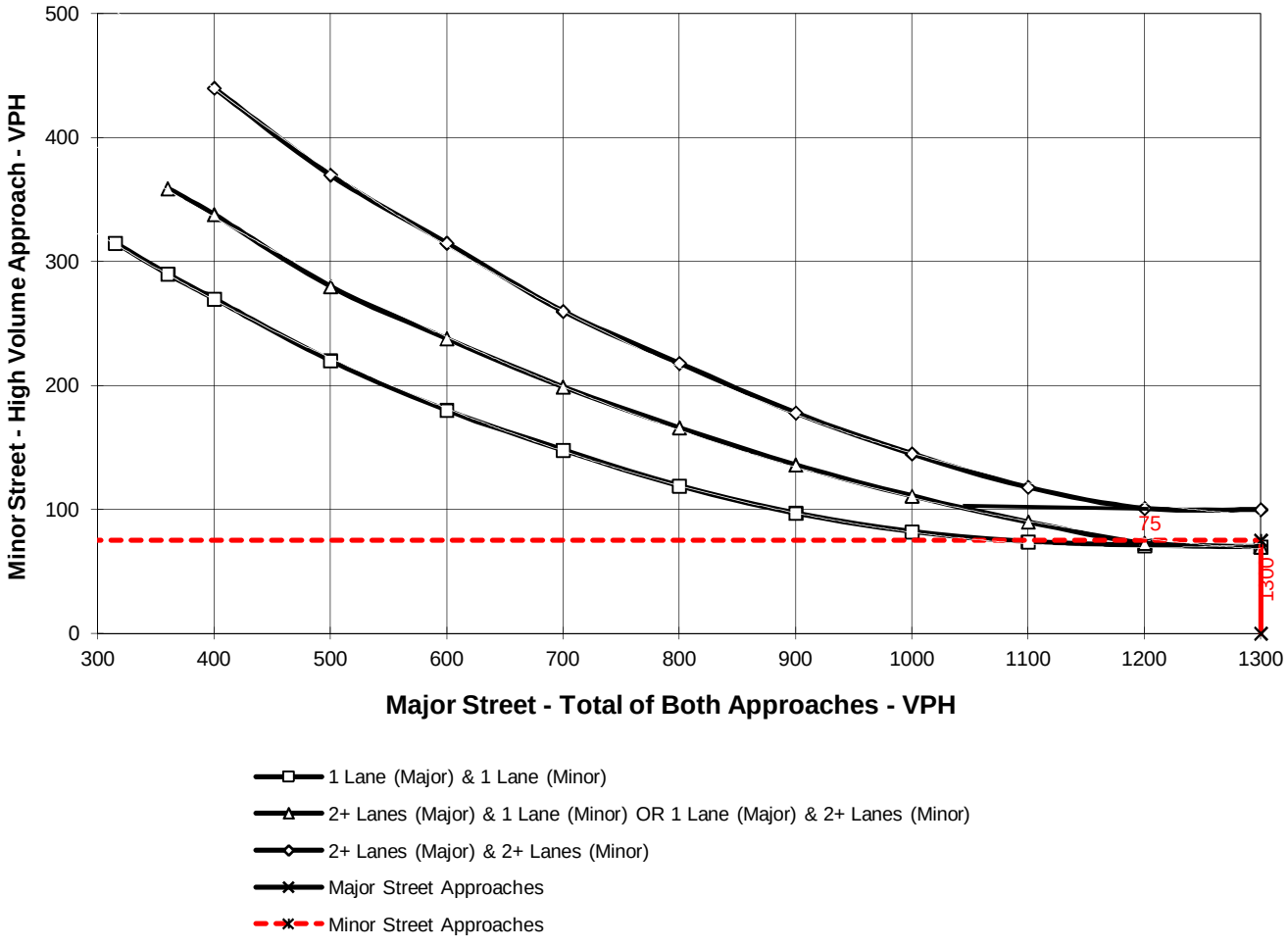
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Valle Vista Road**

High Volume Approach (VPH) = **75**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Year 2035 Without Project

Major Street Name = **Phelan Road**

Total of Both Approaches (VPH) = **1394**

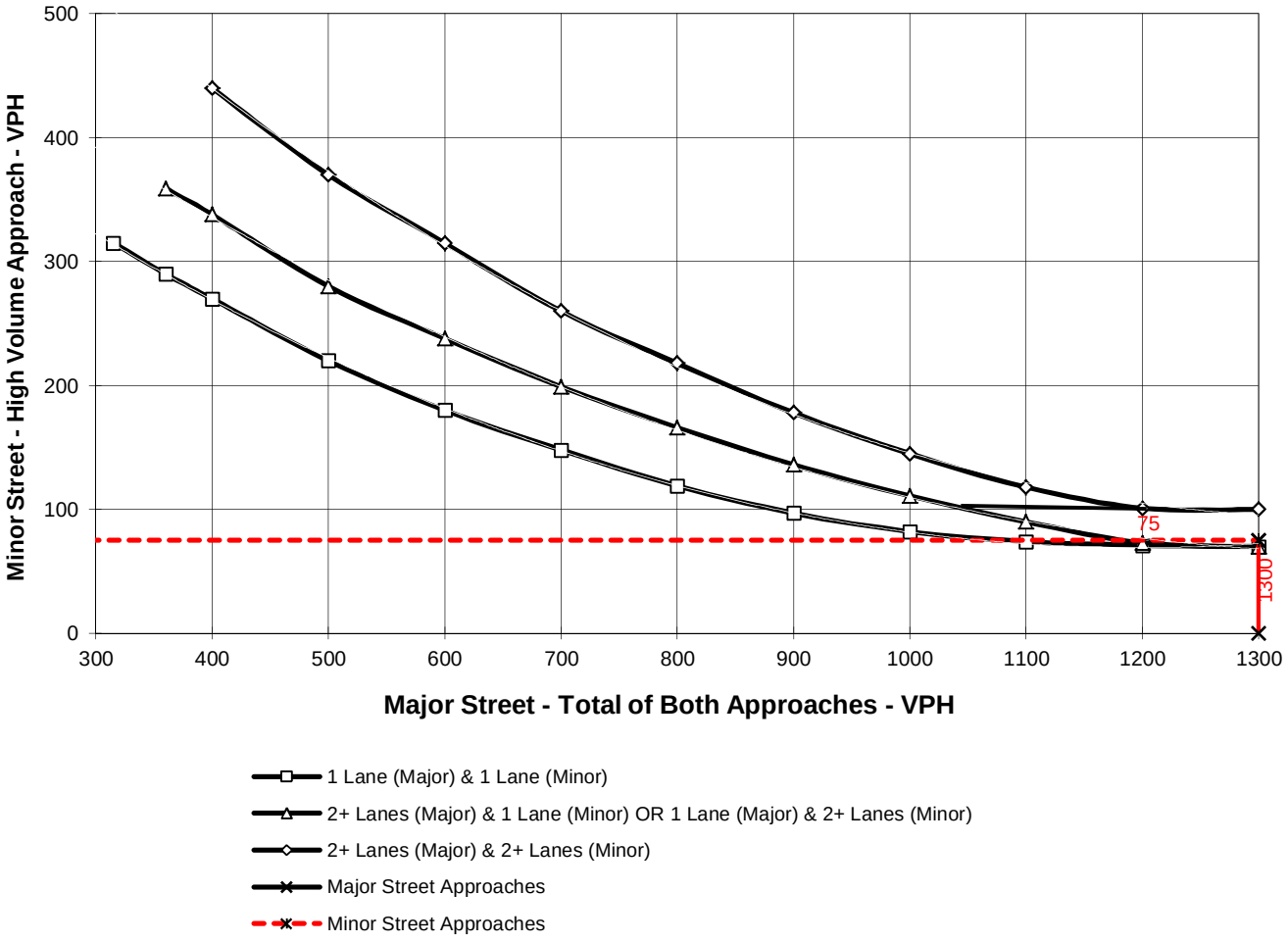
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Eaby Road**

High Volume Approach (VPH) = **75**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

APPENDIX H

Radar Speed Survey

Counts Unlimited, Inc

PO Box 1178
Corona, CA 92878
Phone: 951-268-6268
email: counts@countsunlimited.com

County of San Bernardino
Valle Vista Road
S/ Phelan Road
24 Hour Directional Speed Survey

CSBVVSPH
Site Code: 075-15189

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
04/09/15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
04:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	1	1	1	2	1	1	1	0	0	0	0	0	0	0	8
07:00	1	0	1	8	9	8	3	1	0	0	0	0	0	0	31
08:00	1	3	0	5	13	3	0	0	0	0	0	0	0	0	25
09:00	0	1	2	1	11	2	0	0	0	0	0	0	0	0	17
10:00	0	2	2	5	8	1	2	0	0	0	0	0	0	0	20
11:00	1	2	1	7	4	1	0	0	0	0	0	0	0	0	16
12 PM	2	1	4	9	3	1	0	0	0	0	0	0	0	0	20
13:00	0	0	4	11	4	0	0	0	0	0	0	0	0	0	19
14:00	1	0	3	7	7	2	0	0	0	0	0	0	0	0	20
15:00	0	0	3	4	7	0	0	0	0	0	0	0	0	0	14
16:00	2	1	5	5	12	2	1	0	0	0	0	0	0	0	28
17:00	2	2	2	7	8	2	1	0	0	0	0	0	0	0	24
18:00	2	0	1	5	6	1	0	0	0	0	0	0	0	0	15
19:00	0	0	2	3	1	1	0	0	0	0	0	0	0	0	7
20:00	1	1	1	0	0	0	1	0	0	0	0	0	0	0	4
21:00	2	0	1	2	2	1	0	0	0	0	0	0	0	0	8
22:00	1	0	1	3	0	0	0	0	0	0	0	0	0	0	5
23:00	0	0	1	0	1	1	0	0	0	0	0	0	0	0	3
Total	17	14	36	86	98	29	9	1	0	0	0	0	0	0	290
Grand Total	17	14	36	86	98	29	9	1	0	0	0	0	0	0	290

15th Percentile : 21 MPH
50th Percentile : 29 MPH
85th Percentile : 34 MPH
95th Percentile : 39 MPH

Statistics

Mean Speed(Average) : 29 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 184
Percent in Pace : 63.4%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc

PO Box 1178
Corona, CA 92878
Phone: 951-268-6268
email: counts@countsunlimited.com

County of San Bernardino
Valle Vista Road
S/ Phelan Road
24 Hour Directional Speed Survey

CSBVVSPH
Site Code: 075-15189

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
04/09/15	0	1	0	2	1	0	0	0	0	0	0	0	0	0	4
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	0	0	1	3	0	1	0	0	0	0	0	0	0	7
07:00	0	0	1	7	7	5	0	0	0	0	0	0	0	0	20
08:00	1	0	1	9	9	4	1	0	0	0	0	0	0	0	25
09:00	1	0	0	3	6	2	1	0	0	0	0	0	0	0	13
10:00	3	0	5	6	6	0	0	0	0	0	0	0	0	0	20
11:00	1	2	7	7	3	1	0	0	0	0	0	0	0	0	21
12 PM	4	1	7	7	2	0	0	0	0	0	0	0	0	0	21
13:00	4	2	3	9	6	1	0	0	0	0	0	0	0	0	25
14:00	3	1	4	9	8	1	0	0	0	0	0	0	0	0	26
15:00	2	0	3	11	17	0	0	0	0	0	0	0	0	0	33
16:00	0	0	1	10	14	0	1	0	0	0	0	0	0	0	26
17:00	3	0	6	5	15	4	1	0	0	0	0	0	0	0	34
18:00	5	0	3	7	7	2	1	2	0	0	0	0	0	0	27
19:00	0	0	3	10	15	0	0	0	0	0	0	0	0	0	28
20:00	1	1	1	8	2	0	0	0	0	0	0	0	0	0	13
21:00	0	0	0	1	5	0	1	0	0	0	0	0	0	0	7
22:00	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4
23:00	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4
Total	31	8	47	116	128	20	7	2	0	0	0	0	0	0	359
Grand Total	31	8	47	116	128	20	7	2	0	0	0	0	0	0	359

15th Percentile :	21 MPH
50th Percentile :	29 MPH
85th Percentile :	34 MPH
95th Percentile :	37 MPH

Statistics

Mean Speed(Average) :	28 MPH
10 MPH Pace Speed :	26-35 MPH
Number in Pace :	244
Percent in Pace :	68.0%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%

Counts Unlimited, Inc

PO Box 1178
Corona, CA 92878
Phone: 951-268-6268
email: counts@countsunlimited.com

County of San Bernardino
Valle Vista Road
S/ Phelan Road
24 Hour Directional Speed Survey

CSBVVSPH
Site Code: 075-15189

Northbound, Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
04/09/15	0	1	0	2	1	0	0	0	0	0	0	0	0	0	4
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
04:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	3	1	1	3	4	1	2	0	0	0	0	0	0	0	15
07:00	1	0	2	15	16	13	3	1	0	0	0	0	0	0	51
08:00	2	3	1	14	22	7	1	0	0	0	0	0	0	0	50
09:00	1	1	2	4	17	4	1	0	0	0	0	0	0	0	30
10:00	3	2	7	11	14	1	2	0	0	0	0	0	0	0	40
11:00	2	4	8	14	7	2	0	0	0	0	0	0	0	0	37
12 PM	6	2	11	16	5	1	0	0	0	0	0	0	0	0	41
13:00	4	2	7	20	10	1	0	0	0	0	0	0	0	0	44
14:00	4	1	7	16	15	3	0	0	0	0	0	0	0	0	46
15:00	2	0	6	15	24	0	0	0	0	0	0	0	0	0	47
16:00	2	1	6	15	26	2	2	0	0	0	0	0	0	0	54
17:00	5	2	8	12	23	6	2	0	0	0	0	0	0	0	58
18:00	7	0	4	12	13	3	1	2	0	0	0	0	0	0	42
19:00	0	0	5	13	16	1	0	0	0	0	0	0	0	0	35
20:00	2	2	2	8	2	0	1	0	0	0	0	0	0	0	17
21:00	2	0	1	3	7	1	1	0	0	0	0	0	0	0	15
22:00	2	0	2	5	0	0	0	0	0	0	0	0	0	0	9
23:00	0	0	1	2	3	1	0	0	0	0	0	0	0	0	7
Total	48	22	83	202	226	49	16	3	0	0	0	0	0	0	649
Grand Total	48	22	83	202	226	49	16	3	0	0	0	0	0	0	649

15th Percentile :	21 MPH
50th Percentile :	29 MPH
85th Percentile :	34 MPH
95th Percentile :	38 MPH

Statistics

Mean Speed(Average) :	29 MPH
10 MPH Pace Speed :	26-35 MPH
Number in Pace :	428
Percent in Pace :	65.9%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%

APPENDIX I

Highway Design Manual
Sight Distance Standards

CHAPTER 200 GEOMETRIC DESIGN AND STRUCTURE STANDARDS

Topic 201 - Sight Distance

Index 201.1 - General

Sight distance is the continuous length of highway ahead, visible to the highway user. Four types of sight distance are considered herein: passing, stopping, decision, and corner. Passing sight distance is used where use of an opposing lane can provide passing opportunities (see Index 201.2). Stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads when passing sight distance is not economically obtainable. Stopping sight distance also is to be provided for all users, including motorists and bicyclists, at all elements of interchanges and intersections at grade, including private road connections (see Topic 504, Index 405.1, & Figure 405.7). Decision sight distance is used at major decision points (see Indexes 201.7 and 504.2). Corner sight distance is used at intersections (see Index 405.1, Figure 405.7, and Figure 504.3J).

Table 201.1 shows the minimum standards for stopping sight distance related to design speed for motorists. Stopping sight distances given in the table are suitable for Class II and Class III bikeways. The stopping sight distances are also applicable to roundabout design on the approach roadway, within the circulatory roadway, and on the exits prior to the pedestrian crossings. Also shown in Table 201.1 are the values for use in providing passing sight distance.

See Chapter 1000 for Class I bikeway sight distance guidance.

Chapter 3 of "A Policy on Geometric Design of Highways and Streets," AASHTO, contains a thorough discussion of the derivation of stopping sight distance.

201.2 Passing Sight Distance

Passing sight distance is the minimum sight distance required for the driver of one vehicle to pass another vehicle safely and comfortably. Passing must be accomplished assuming an oncoming vehicle comes into view and maintains the design speed, without reduction, after the overtaking maneuver is started.

Table 201.1
Sight Distance Standards

Design Speed(1) (mph)	Stopping(2) (ft)	Passing (ft)
10	50	---
15	100	---
20	125	800
25	150	950
30	200	1,100
35	250	1,300
40	300	1,500
45	360	1,650
50	430	1,800
55	500	1,950
60	580	2,100
65	660	2,300
70	750	2,500
75	840	2,600
80	930	2,700

(1) See Topic 101 for selection of design speed.
(2) For sustained downgrades, refer to advisory standard in Index 201.3

The sight distance available for passing at any place is the longest distance at which a driver whose eyes are 3 ½ feet above the pavement surface can see the top of an object 4 ¼ feet high on the road. See Table 201.1 for the calculated values that are associated with various design speeds.

In general, 2-lane highways should be designed to provide for passing where possible, especially those routes with high volumes of trucks or recreational vehicles. Passing should be done on tangent horizontal alignments with constant grades or a slight sag vertical curve. Not only are drivers reluctant to pass on a long crest vertical curve, but it is impracticable to design crest vertical curves to provide for passing sight distance because of high

cost where crest cuts are involved. Passing sight distance for crest vertical curves is 7 to 17 times longer than the stopping sight distance.

Ordinarily, passing sight distance is provided at locations where combinations of alignment and profile do not require the use of crest vertical curves.

Passing sight distance is considered only on 2-lane roads. At critical locations, a stretch of 3- or 4-lane passing section with stopping sight distance is sometimes more economical than two lanes with passing sight distance.

Passing on sag vertical curves can be accomplished both day and night because headlights can be seen through the entire curve.

See Part 3 of the California Manual on Uniform Traffic Control Devices (California MUTCD) for criteria relating to the placement of barrier striping for no-passing zones. Note, that the passing sight distances shown in the California MUTCD are based on traffic operational criteria. Traffic operational criteria are different from the design characteristics used to develop the values provided in Table 201.1 and Chapter 3 of AASHTO, A Policy on Geometric Design of Highways and Streets. The aforementioned table and AASHTO reference are also used to design the vertical profile and horizontal alignment of the highway. Consult the Headquarters (HQ) Traffic Liaison when using the California MUTCD criteria for traffic operating-control needs.

Other means for providing passing opportunities, such as climbing lanes or turnouts, are discussed in Index 204.5. Chapter 3 of AASHTO, A Policy on Geometric Design of Highways and Streets, contains a thorough discussion of the derivation of passing sight distance.

201.3 Stopping Sight Distance

The minimum stopping sight distance is the distance required by the user, traveling at a given speed, to bring the vehicle or bicycle to a stop after an object ½-foot high on the road becomes visible. Stopping sight distance for motorists is measured from the driver's eyes, which are assumed to be 3 ½ feet above the pavement surface, to an object ½-foot high on the road. See Index 1003.1(10) for Class I bikeway stopping sight distance guidance.

The stopping sight distances in Table 201.1 should be increased by 20 percent on sustained downgrades steeper than 3 percent and longer than one mile.

201.4 Stopping Sight Distance at Grade Crests

Figure 201.4 shows graphically the relationships between length of highway crest vertical curve, design speed, and algebraic difference in grades. Any one factor can be determined when the other two are known.

201.5 Stopping Sight Distance at Grade Sags

From the curves in Figure 201.5, the minimum length of vertical curve which provides headlight sight distance in grade sags for a given design speed can be obtained.

If headlight sight distance is not obtainable at grade sags, lighting may be considered. The Design Coordinator and the HQ Traffic Liaison shall be contacted to review proposed grade sag lighting to determine if such use is appropriate.

201.6 Stopping Sight Distance on Horizontal Curves

Where an object off the pavement such as a bridge pier, building, cut slope, or natural growth restricts sight distance, the minimum radius of curvature is determined by the stopping sight distance.

Available stopping sight distance on horizontal curves is obtained from Figure 201.6. It is assumed that the driver's eye is 3 ½ feet above the center of the inside lane (inside with respect to curve) and the object is ½-foot high. The line of sight is assumed to intercept the view obstruction at the midpoint of the sight line and 2 feet above the center of the inside lane when the road profile is flat (i.e. no vertical curve). Crest vertical curves can cause additional reductions in sight distance. The clear distance (m) is measured from the center of the inside lane to the obstruction.

The design objective is to determine the required clear distance from centerline of inside lane to a retaining wall, bridge pier, abutment, cut slope, or other obstruction for a given design speed. Using radius of curvature and minimum sight distance for that design speed, Figure 201.6 gives the clear

distance (*m*) from centerline of inside lane to the obstruction.

See Index 1003.1(12) for bikeway stopping sight distance on horizontal curve guidance.

When the radius of curvature and the clear distance to a fixed obstruction are known, Figure 201.6 also gives the sight distance for these conditions.

See Index 101.1 for technical reductions in design speed caused by partial or momentary horizontal sight distance restrictions. See Index 203.2 for additional comments on glare screens.

Cuts may be widened where vegetation restricting horizontal sight distance is expected to grow on finished slopes. Widening is an economic trade-off that must be evaluated along with other options. See Index 902.2 for sight distance requirements on landscape projects.

201.7 Decision Sight Distance

At certain locations, sight distance greater than stopping sight distance is desirable to allow drivers time for decisions without making last minute erratic maneuvers (see Chapter III of AASHTO, A Policy on Geometric Design of Highways and Streets, for a thorough discussion of the derivation of decision sight distance.)

On freeways and expressways the decision sight distance values in Table 201.7 should be used at lane drops and at off-ramp noses to interchanges, branch connections, roadside rests, vista points, and inspection stations. When determining decision sight distance on horizontal and vertical curves, Figures 201.4, 201.5, and 201.6 can be used. Figure 201.7 is an expanded version of Figure 201.4 and gives the relationship among length of crest vertical curve, design speed, and algebraic difference in grades for much longer vertical curves than Figure 201.4.

Decision sight distance is measured using the 3 ½-foot eye height and ½-foot object height. See Index 504.2 for sight distance at secondary exits on a collector-distributor road.

Table 201.7
Decision Sight Distance

Design Speed (mph)	Decision Sight Distance (ft)
30	450
35	525
40	600
45	675
50	750
55	865
60	990
65	1,050
70	1,105
75	1,180
80	1,260

Topic 202 - Superelevation

202.1 Basic Criteria

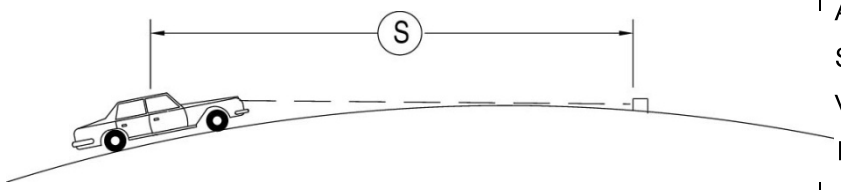
According to the laws of mechanics, when a vehicle travels on a curve it is forced outward by centrifugal force.

On a superelevated highway, this force is resisted by the vehicle weight component parallel to the superelevated surface and side friction between the tires and pavement. It is impractical to balance centrifugal force by superelevation alone, because for any given curve radius a certain superelevation rate is exactly correct for only one driving speed. At all other speeds there will be a side thrust either outward or inward, relative to the curve center, which must be offset by side friction.

If the vehicle is not skidding, these forces are in equilibrium as represented by the following equation, which is used to design a curve for a comfortable operation at a particular speed:

$$\text{Centrifugal Factor} = e + f = \frac{0.067V^2}{R} = \frac{V^2}{15R}$$

Figure 201.4
Stopping Sight Distance on Crest Vertical Curves



Drivers eye height is 3 ½ feet.
Object height is ½-foot.

L = Curve Length (feet)

A = Algebraic Grade Difference (%)

S = Sight Distance (feet)

V = Design Speed for "S" in mph

K = Distance in feet required to achieve a 1% change in grade. K value as shown on graph is valid when S < L.

Notes:

- Before using this figure for intersections, branch connections and exits, see Indexes 201.7 and 405.1, and Topic 504.
- See Figure 204.4 for vertical curve formulas.
- See Index 204.4 for minimum length of vertical curve

When S > L	When S < L
$L = 2S - 1329/A$	$L = AS^2/1329$

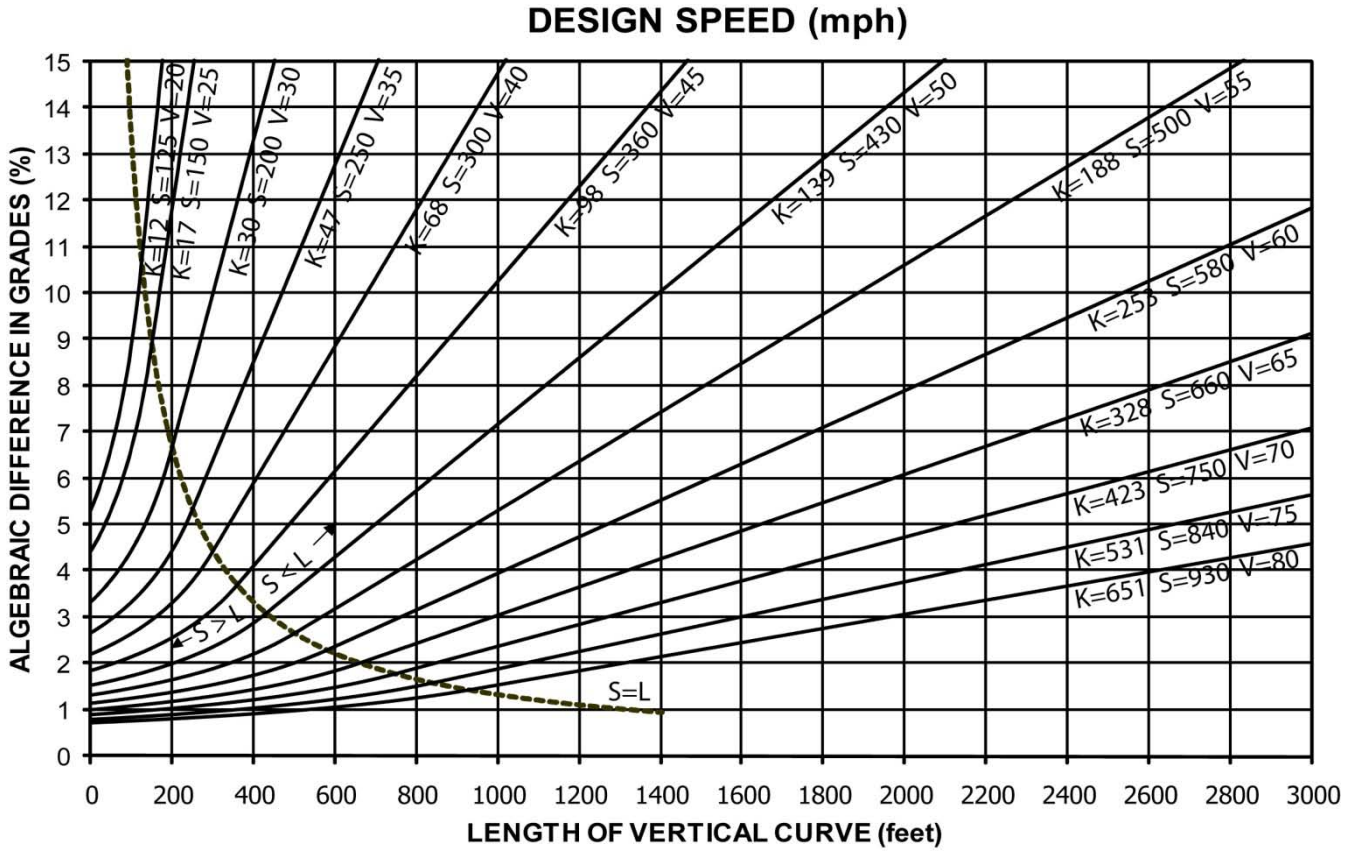
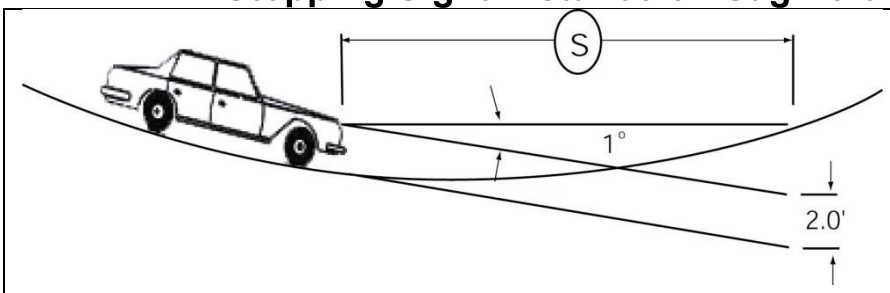


Figure 201.5
Stopping Sight Distance on Sag Vertical Curves



L = Curve Length (feet)
A = Algebraic Grade Difference (%)
S = Sight Distance (feet)
V = Design Speed for "S" in mph
K = Distance in feet required to achieve a 1% change in grade. K value as shown on graph is valid when S < L.

Notes:

- For sustained downgrades, see Index 201.3.
- Before using this figure for intersections, branch connections and exits, see Indexes 201.7 and 405.1, and Topic 504.
- See Figure 204.4 for vertical curve formulas.
- See Index 204.4 for minimum length of vertical curve.

When S > L	When S < L
$L = 2S - (400 + 3.5S)/A$	$L = AS^2/(400 + 3.5S)$

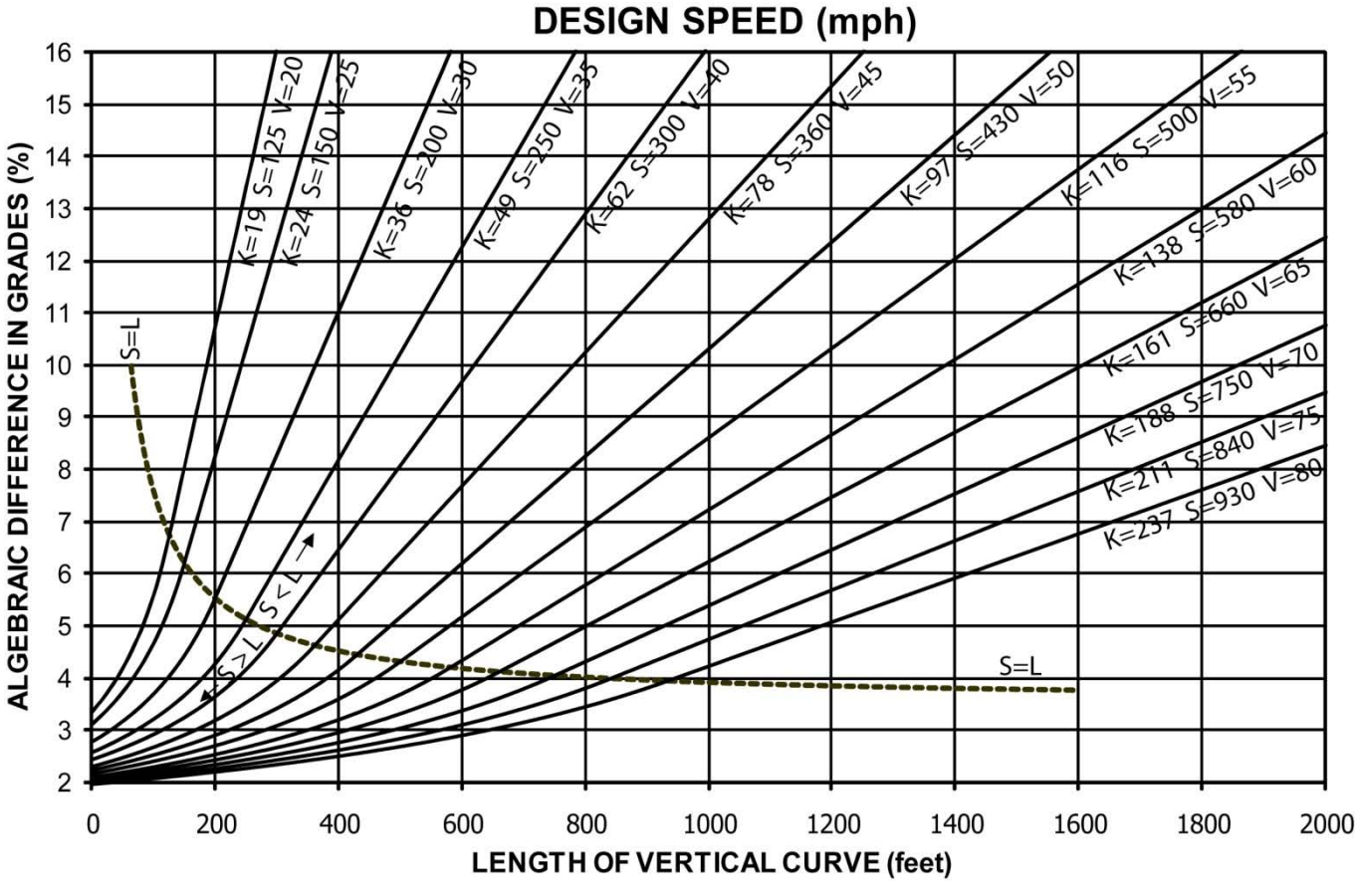
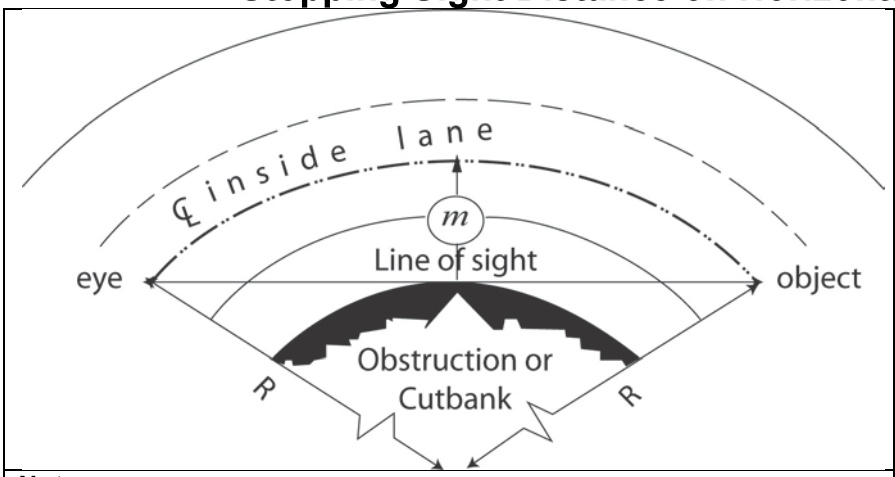


Figure 201.6
Stopping Sight Distance on Horizontal Curves



Line of sight is 2.0 feet above the centerline inside lane at point of obstruction.

R = Radius of the centerline of the lane nearest the obstruction (feet).

S = Sight Distance (feet)

V = Design Speed for "S" in mph

m = Clear distance from centerline of the lane nearest the obstruction (feet).

Notes:

- For sustained downgrades, see Index 201.3.
- Formulas apply only when "S" is equal to or less than length of curve.
- Angles in formulas are expressed in degrees.

$$m = R\left[1 - \cos\left(\frac{28.65S}{R}\right)\right]$$

$$S = \frac{R}{28.65}\left[\cos^{-1}\left(\frac{R - m}{R}\right)\right]$$

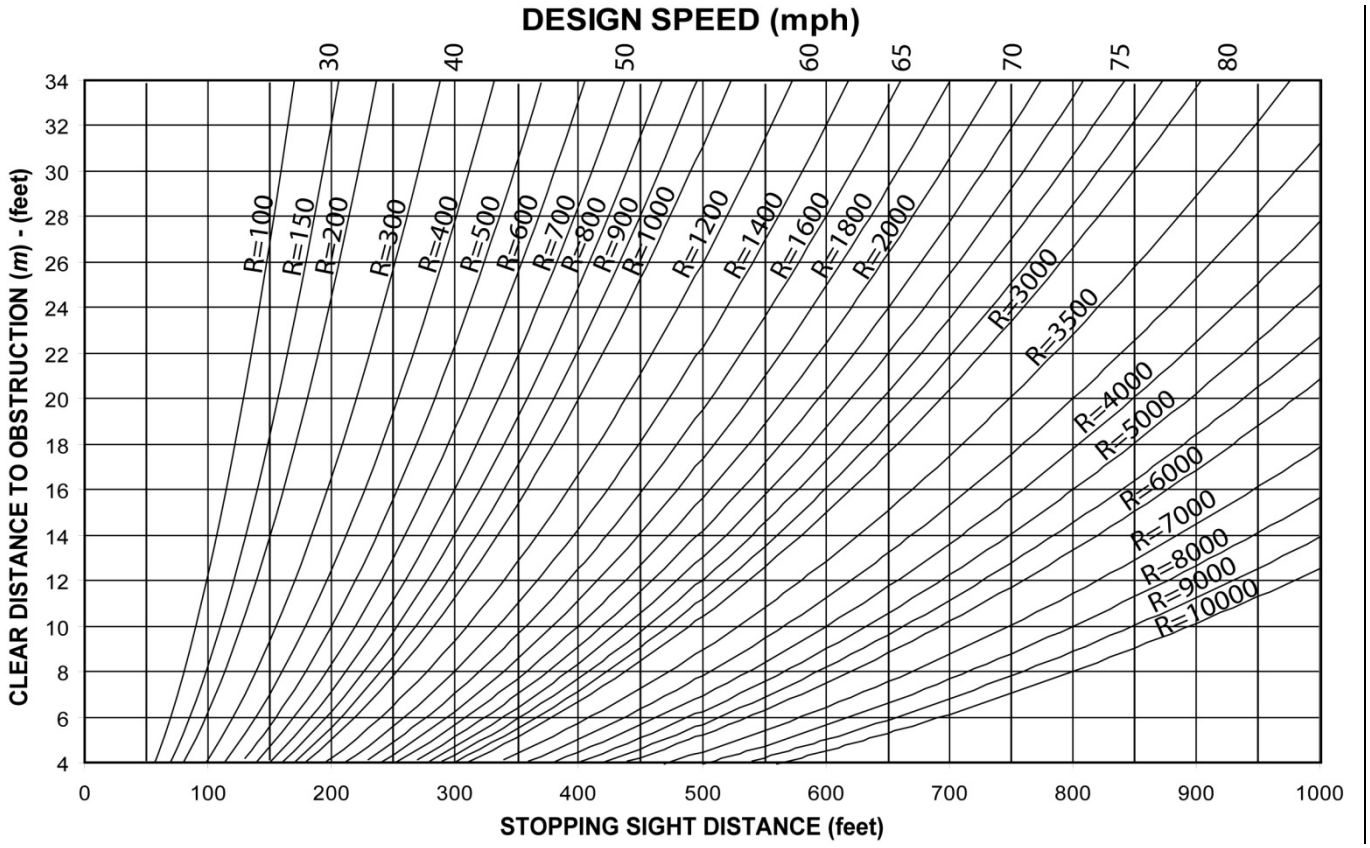
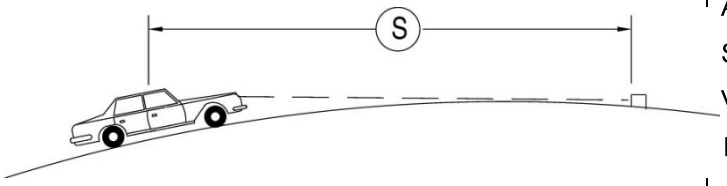


Figure 201.7
Decision Sight Distance on Crest Vertical Curves



Drivers eye height is 3½ feet.
Object height is ½-foot.

L = Curve Length (feet)

A = Algebraic Grade Difference (%)

S = Sight Distance (feet)

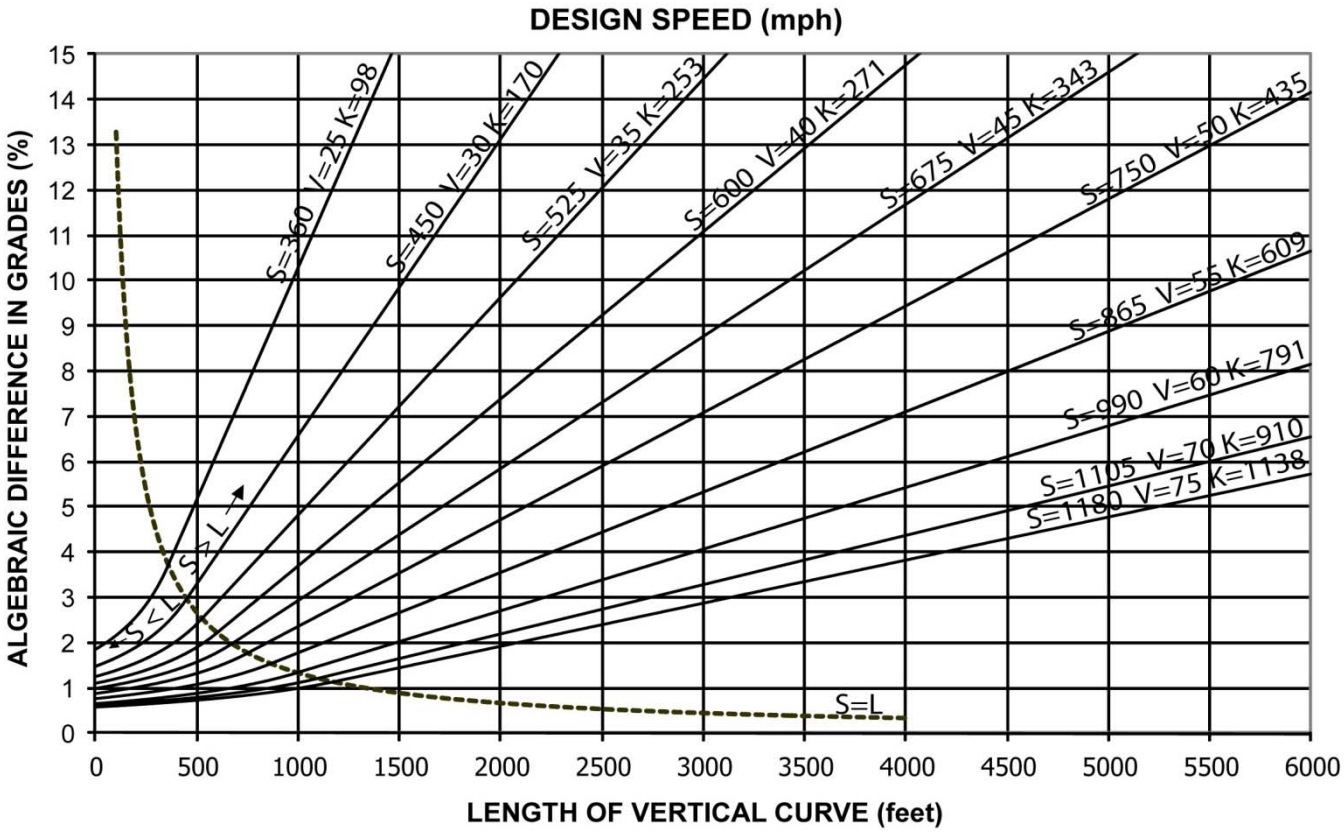
V = Design Speed for "S" in mph

K = Distance in feet required to achieve a 1% change in grade. K value as shown on graph is valid when S < L.

Notes:

- Before using this figure for intersections, branch connections and exits, see Indexes 201.7 and 405.1, and Topic 504.
- See Figure 204.4 for vertical curve formulas.
- See Index 204.4 for minimum length of vertical curve.

When S > L	When S < L
$L = 2S - 1329/A$	$L = AS^2/1329$



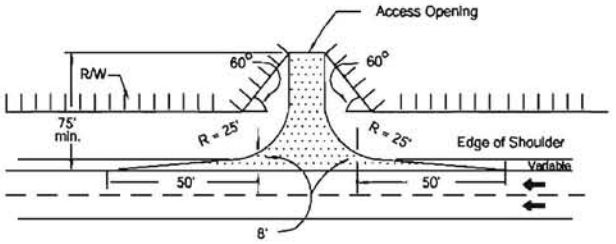
(3) Recessed Access Openings. Recessed access openings, as shown on Figure 205.1, are desirable at all points where private access is permitted and should be provided whenever they can be obtained without requiring alterations to existing adjacent improvements. When recessed openings are required, the opening should be located a minimum distance of 75 feet from the nearest edge of the traveled way.

(4) Joint Openings. A joint access opening serving two or more parcels of land is desirable whenever feasible. If the property line is not normal to the right of way line, care should be taken in designing the joint opening so that both owners are adequately served.

(5) Surfacing. All points of private access should be surfaced with adequate width and depth of pavement to serve the anticipated traffic. The surfacing should extend from the edge of the traveled way to the right of way line.

Figure 205.1

Access Openings on Expressways



RECESSED OPENING

NOTES:

- By widening the expressway shoulder, deceleration lanes may be provided where justified.
- This detail, without the recess, may be used on conventional highways.

205.2 Private Road Connections

The minimum private road connection design is shown on Figure 205.1. Sight distance requirements for the minimum private road connection are shown on Figure 405.7 (see Index 405.1(2)(c)).

205.3 Urban Driveways

These instructions apply to the design of driveways to serve property abutting on State highways in cities or where urban type development is encountered.

Details for driveway construction are shown on the Standard Plans. Corner sight distance requirements are not applied to urban driveways. See Index 405.1(2) for further information.

(1) Correlation with Local Standards. Where there is a local requirement regulating driveway construction, the higher standard will normally govern.

(2) Driveway Width. The width of driveways for both residential and commercial usage is measured at the throat, exclusive of any flares. ("W" as shown in Standard Plan A87A).

(3) Residential Driveways. The width of single residential driveways should be 12 feet minimum and 20 feet maximum. The width of a double residential driveway such as used for multiple dwellings should be 20 feet minimum and 30 feet maximum. The width selected should be based on an analysis of the anticipated volume, type and speed of traffic, location of buildings and garages, width of street, etc.

(4) Commercial Driveways. Commercial driveways should be limited to the following maximum widths:

(a) When the driveway is used for one-way traffic, the maximum width should be 25 feet. If the driveway serves a large parcel, where large volumes of vehicles or large vehicles are expected, the entrance maximum width should be 40 feet and the exit maximum width should be 35 feet.

(b) When the driveway is used for two-way traffic, the maximum width should be 35 feet. If the driveway serves a large parcel, where large volumes of vehicles or

large vehicles are expected, then the maximum width should be 45 feet.

(c) When only one driveway serves a given property, in no case should the width of the driveway including the side slope distances exceed the property frontage.

(d) When more than one driveway is to serve a given property, the total width of all driveways should not exceed 70 percent of the frontage where such a frontage is 100 feet or less. Where the frontage is more than 100 feet, the total driveway width should not exceed 60 percent of the frontage. In either case, the width of the individual driveway should not exceed those given in the preceding paragraphs. Where more than one driveway is necessary to serve any one property, not less than 20 feet of full height curb should be provided between driveways. This distance between driveways also applies to projects where curbs and gutters are not to be placed.

(e) Certain urban commercial driveways may need to accommodate the maximum legal vehicle. The width will be determined by the use of truck turn templates.

(5) Surfacing. Where curbs, gutters, and sidewalks are to be placed, driveways should be constructed of portland cement concrete. Where only curbs and gutters are to be placed and pedestrian traffic or adjacent improvements do not warrant concrete driveway construction, the driveway may be paved with the same materials used for existing surfacing on the property to be served.

(6) Pedestrian Access. Where sidewalks traverse driveways, the sidewalk shall continue across the driveway to alert driveway users that they are crossing a pedestrian walkway, and must yield to pedestrians on the sidewalk. Driveway corner radii should also be minimized to encourage low-speed turns by motorized vehicles and bicycles. For accessibility requirements, see DIB 82. Provision of this feature, as indicated in the Standard Plans, may require the acquisition of a construction easement or additional right of way. Assessment of these needs must be performed early enough in the design to allow time for acquiring any necessary permits or right of way. Additionally, designers should consider the following:

- In many cases providing the pathway along the back of the driveway will lower the elevation at the back of the sidewalk. Depending on grades behind the sidewalk the potential may exist for roadway generated runoff to enter private property. The need for features such as low berms within the construction easement, or installation of catch basins upstream of the driveway should be determined.

When there are no sidewalks or other pedestrian facilities that follow the highway, the designer may develop driveway details that eliminate the flatter portion along the back edge in lieu of using the Standard Plans for driveways. Refer to Topic 105 for additional information related to pedestrian facilities.

205.4 Driveways on Frontage Roads and in Rural Areas

On frontage roads and in rural areas where the maximum legal vehicle must be accommodated, standard truck-turn templates should be used to determine driveway widths where the curb or edge of traveled way is so close to the right of way line that a usable connection cannot be provided within the standard limits.

Where county or city regulations differ from the State's, it may be desirable to follow their regulations, particularly where jurisdiction of the frontage road will ultimately be in their hands.

Details for driveway construction are shown on the Standard Plans. For corner sight distance, see Index 405.1(2)(c).

Driveways connecting to State highways shall be paved a minimum of 33 feet or to the edge of State right of way, whichever is less to minimize or eliminate gravel from being scattered on the highway and to provide a good surface for vehicles

404.5 Turning Templates & Vehicle Diagrams

Figures 404.5A through G are computer-generated turning templates at an approximate scale of 1"=50' and their associated vehicle diagrams for the design vehicles described in Index 404.3. The radius of the template is measured to the outside front wheel path at the beginning of the curve. Figures 404.5A through G contain the terms defined as follows:

(1) Tractor Width - Width of tractor body.

(2) Trailer Width - Width of semitrailer body.

(3) Tractor Track - Tractor axle width, measured from outside face of tires.

(4) Trailer Track – Semitrailer axle width, measured from outside face of tires.

(5) Lock To Lock Time - The time in seconds that an average driver would take under normal driving conditions to turn the steering wheel of a vehicle from the lock position on one side to the lock position on the other side. The default in AutoTurn software is 6 seconds.

(6) Steering Lock Angle - The maximum angle that the steering wheels can be turned. It is further defined as the average of the maximum angles made by the left and right steering wheels with the longitudinal axis of the vehicle.

(7) Articulating Angle - The maximum angle between the tractor and semitrailer.

Topic 405 - Intersection Design Standards

405.1 Sight Distance

(1) Stopping Sight Distance. See Index 201.1 for minimum stopping sight distance requirements.

(2) *Corner Sight Distance.*

(a) General--At unsignalized intersections a substantially clear line of sight should be maintained between the driver of a vehicle, bicyclist or pedestrian waiting at the crossroad and the driver of an approaching vehicle. Line of sight for all users should be included in right of way, in order to preserve sight lines. Adequate time must be provided for the waiting user to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed.

The values given in Table 405.1A provide 7-1/2 seconds for the driver on the crossroad to complete the necessary maneuver while the approaching vehicle travels at the assumed design speed of the main highway. The 7-1/2 second criterion is normally applied to all lanes of through traffic in order to cover all possible maneuvers by the vehicle at the crossroad. However, by providing the standard corner sight distance to the lane nearest to and farthest from the waiting vehicle, adequate time should be obtained to make the necessary movement. On multilane highways a 7-1/2 second criterion for the outside lane, in both directions of travel, normally will provide increased sight distance to the inside lanes. Consideration should be given to increasing these values on downgrades steeper than 3 percent and longer than 1 mile (see Index 201.3), where there are high truck volumes on the crossroad, or where the skew of the intersection substantially increases the distance traveled by the crossing vehicle.

In determining corner sight distance, a set back distance for the vehicle waiting at the crossroad must be assumed. **Set back for the driver of the vehicle on the crossroad shall be a minimum of 10 feet plus the shoulder width of the major road but not less than 15 feet.** Line of sight for corner sight distance is to be determined from a 3 and 1/2-foot height at the location of the driver of the vehicle on the minor road to a 4 and 1/4-foot object height in the center of the approaching lane of the major road as illustrated in Figure 504.3J. If the major road has a median barrier, a 2-foot object height should be used to determine the median barrier set back.

In some cases the cost to obtain 7-1/2 seconds of corner sight distances

may be excessive. High costs may be attributable to right of way acquisition, building removal, extensive excavation, or immitigable environmental impacts. In such cases a lesser value of corner sight distance, as described under the following headings, may be used.

(b) Public Road Intersections (Refer to Topic 205)--At unsignalized public road intersections (see Index 405.7) corner sight distance values given in Table 405.1A should be provided.

At signalized intersections the values for corner sight distances given in Table 405.1A should also be applied whenever possible. Even though traffic flows are designed to move at separate times, unanticipated conflicts can occur due to violation of signal, right turns on red, malfunction of the signal, or use of flashing red/yellow mode.

Table 405.1A Corner Sight Distance (7-1/2 Second Criteria)

Design Speed (mph)	Corner Sight Distance (ft)
25	275
30	330
35	385
40	440
45	495
50	550
55	605
60	660
65	715
70	770

Where restrictive conditions exist, similar to those listed in Index 405.1(2)(a), the minimum value for corner sight distance at both signalized and unsignalized intersections shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.

(c) Private Road Intersections (Refer to Index 205.2) and Rural Driveways (Refer to Index 205.4)**--The minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.**

(d) Urban Driveways (Refer to Index 205.3)--Corner sight distance requirements as described above are not applied to urban driveways.

(3) Decision Sight Distance. At intersections where the State route turns or crosses another State route, the decision sight distance values given in Table 201.7 should be used. In computing and measuring decision sight distance, the 3.5-foot eye height and the 0.5-foot object height should be used, the object being located on the side of the intersection nearest the approaching driver.

The application of the various sight distance requirements for the different types of intersections is summarized in Table 405.1B.

(4) Acceleration Lanes for Turning Moves onto State Highways. At rural intersections, with "STOP" control on the local cross road, acceleration lanes for left and right turns onto the State facility should be considered. At a minimum, the following features should be evaluated for both the major highway and the cross road:

- divided versus undivided
- number of lanes
- design speed
- gradient
- lane, shoulder and median width
- traffic volume and composition of highway users, including trucks and transit vehicles
- turning volumes
- horizontal curve radii
- sight distance
- proximity of adjacent intersections
- types of adjacent intersections

For additional information and guidance, refer to AASHTO, A Policy on Geometric Design of Highways and Streets, the Headquarters Traffic Liaison and the Design Coordinator.

Table 405.1B Application of Sight Distance Requirements

Intersection Types	Sight Distance		
	Stopping	Corner	Decision
Private Roads	X	X(1)	
Public Streets and Roads	X	X	
Signalized Intersections	X	(2)	
State Route Intersections & Route Direction Changes, with or without Signals	X	X	X

NOTES:

(1) Using stopping sight distance between an eye height of 3.5 ft and an object height of 4.25 ft. See Index 405.1(2)(a) for setback requirements.

(2) Apply corner sight distance requirements at signalized intersections whenever possible due to unanticipated violations of the signals or malfunctions of the signals. See Index 405.1(2)(b).

405.2 Left-turn Channelization

(1) General. The purpose of a left-turn lane is to expedite the movement of through traffic by, controlling the movement of turning traffic, increasing the capacity of the intersection, and improving safety characteristics.

The District Traffic Branch normally establishes the need for left-turn lanes.

(2) Design Elements.

(a) Lane Width – **The lane width for both single and double left-turn lanes on State highways shall be 12 feet.**

For conventional State highways with posted speeds less than or equal to 40 miles per hour and AADTT (truck volume) less than 250 per lane that are in urban, city or town centers (rural main streets), the minimum lane width shall be 11 feet.

When considering lane width reductions adjacent to curbed medians, refer to Index 303.5 for guidance on effective roadway width, which may vary depending on drivers' lateral positioning and shy distance from raised curbs.

(b) Approach Taper -- On conventional highways without a median, an approach taper provides space for a left-turn lane by moving traffic laterally to the right. The approach taper is unnecessary where a median is available for the full width of the left-turn lane. Length of the approach taper is given by the formula on Figures 405.2A, B and C.

Figure 405.2A shows a standard left-turn channelization design in which all widening is to the right of approaching traffic and the deceleration lane (see below) begins at the end of the approach taper. This design should be used in all situations where space is available, usually in rural and semi-rural areas or in urban areas with high traffic speeds and/or volumes.

Figures 405.2B and 405.2C show alternate designs foreshortened with the deceleration lane beginning at the 2/3 point of the approach taper so that part of the deceleration takes place in the through traffic lane. Figure 405.2C is shortened further by widening half (or other appropriate fraction) on each side. These designs may be used in urban areas where constraints exist, speeds are moderate and traffic volumes are relatively low.

(c) Bay Taper -- A reversing curve along the left edge of the traveled way directs traffic into the left-turn lane. The length of this bay taper should be short to clearly delineate the left-turn move and to discourage through traffic from drifting into the left-turn lane. Table 405.2A gives offset data for design of bay tapers. In urban areas,

405.7 Public Road Intersections

The basic design to be used at right-angle public road intersections on the State Highway System is shown in Figure 405.7. The essential elements are sight distance (see Index 405.1) and the treatment of the right-turn on and off the main highway. Encroachment into opposing traffic lanes by the turning vehicle should be avoided or minimized.

(1) Right-turn Onto the Main Highway. The combination of a circular curve joined by a 2:1 taper on the crossroads and a 75-foot taper on the main highway is designed to fit the wheel paths of the appropriate turning template chosen by the designer.

It is desirable to keep the right-turn as tight as practical, so the "STOP" or "YIELD" sign on the minor leg can be placed close to the intersection.

(2) Right-turn Off the Main Highway. The combination of a circular curve joined by a 150-foot taper on the main highway and a 4:1 taper on the crossroads is designed to fit the wheel paths of the appropriate turning template and to move the rear of the vehicle off the main highway. Deceleration and storage lanes may be provided when necessary (see Index 405.3).

(3) Alternate Designs. Offsets are given in Figure 405.7 for right angle intersections. For skew angles, roadway curvature, and possibly other reasons, variations to the right-angle design are permitted, but the basic rule is still to approximate the wheel paths of the design vehicle.

A three-center curve is an alternate treatment that may be used at the discretion of the designer.

Intersections are major consideration in bicycle path design as well. See Indexes 403.6 and 1003.1(4) for general bicycle path intersection design guidance. Also see Section 5.3 of the AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities.

405.8 City Street Returns and Corner Radii

The pavement width and corner radius at city street intersections is determined by the type of vehicle to be accommodated and the mobility needs of pedestrians and bicyclists, taking into consideration the amount of available right of way, the types of adjoining land uses, the place types, the roadway width, and the number of lanes on the intersecting street.

At urban intersections, the California truck or the Bus Design Vehicle template may be used to determine the corner radius. Where STAA truck access is allowed, the STAA Design Vehicle template should be used giving consideration to factors mentioned above. See Index 404.3.

Smaller radii of 15 feet to 25 feet are appropriate at minor cross streets where few trucks or buses are turning. Local agency standards may be appropriate in urban and suburban areas.

Encroachment into opposing traffic lanes must be avoided.

405.9 Widening of 2-lane Roads at Signalized Intersections

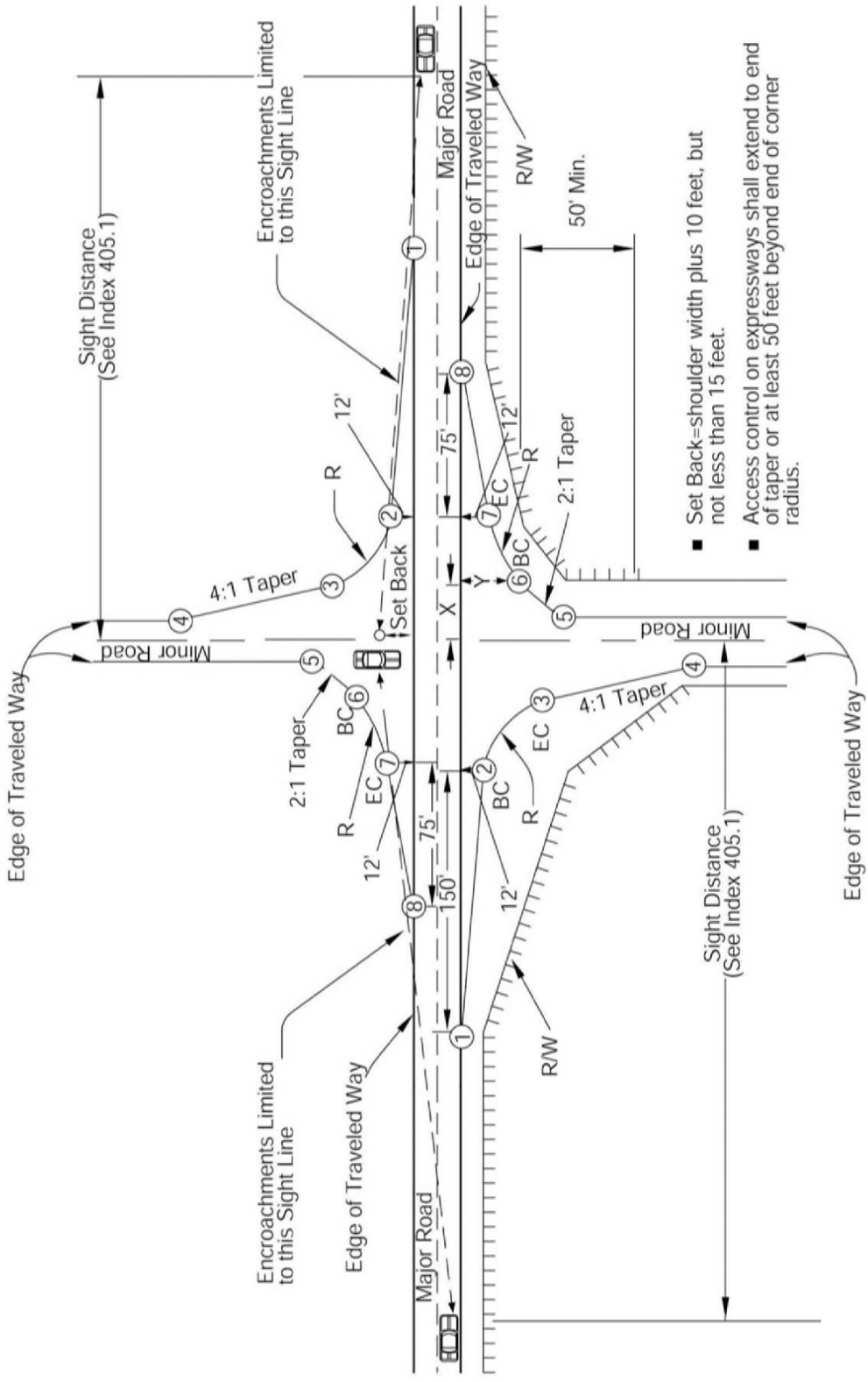
Two-lane State highways may be widened at intersections to 4-lanes whenever signals are installed. Sometimes it may be necessary to widen the intersecting road. The minimum design is shown in Figure 405.9. More elaborate treatment may be warranted by the volume and pattern of traffic movements. Unusual turning movement patterns may possibly call for a different shape of widening.

The impact on pedestrian and bicycle traffic mobility of larger intersections should be assessed before a decision is made to widen an intersection.

405.10 Roundabouts

Roundabout intersections on the State highway system must be developed and evaluated in accordance with National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Informational Guide, 2nd ed." (NCHRP Guide 2) dated October 2010 and Traffic Operations Policy Directive (TOPD) Number 13-02. Also see Index 401.5 for general information and guidance. See Figure 405.10 Roundabout Geometric Elements for nomenclature associated with roundabouts. Signs, striping and markings at roundabouts are to comply with the California MUTCD.

Figure 405.7
Public Road Intersections



X - Distance measured from centerline of minor road along major road - feet.
Y - Offset distance measured from edge of traveled way of major road to any given point - feet.

Radius of Curve	Design Vehicle	Pt ①		Pt ②		Pt ③		Pt ④		Pt ⑤		Pt ⑥		Pt ⑦		Pt ⑧	
		X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
30'	Bus	204.20	0.0	54.20	12.0	27.49	34.63	12.0	96.58	12.0	40.66	18.23	28.21	40.32	12.0	115.32	0.0
40'	California	215.08	0.0	65.08	12.0	29.46	42.17	12.0	112.03	12.0	53.35	21.87	33.61	51.33	12.0	126.33	0.0
50'	STAA	226.09	0.0	76.09	12.0	31.57	49.71	12.0	127.98	12.0	75.63	30.31	39.01	67.13	12.0	142.13	0.0

APPENDIX J

Preliminary Construction Cost Estimates
For Congestion Management Program

PRELIMINARY CONSTRUCTION COST ESTIMATES
FOR
CONGESTION MANAGEMENT PLAN

Add One Lane Each Direction on Freeway	
Asphalt Concrete Pavement	$2,300,000 Per Mile
Portland Cement Concrete Pavement	$2,800,000 Per Mile
Includes: Excavation Paving Section Barrier Shoulder Upgrade Drainage System Traffic Control Mobilization @10% Design @11% Construction Mgt. @12.5%	**Excludes:** Environmental Costs Right of Way Widening of Bridge Structures Added Retaining Walls Added Sound Walls

Widen Existing UC Structures	
Total Cost =	$160 Per Square Foot
Includes: Structure Mobilization @10% Design @11% Construction Mgt. @12.5%	**Excludes:** Environmental Costs Right of Way Traffic Control Ramp Modifications Signal/Lighting Up Grades Drainage Upgrades Added Retaining Walls Added Sound Walls

Diamond Interchanges			
$10,000,000	EACH	NEW IC	Minimal Row/Environmental
$15,000,000	EACH	NEW IC	Includes Row/Environmental
$20,000,000	EACH	EXISTING	Minimal Row/Environmental
$25,000,000	EACH	EXISTING	Includes Row/ Environmental
Includes: Structure Retaining Walls Soil Nail Walls Drainage System Ramps Mobilization @ 10% Design @ 11% Construction Mgt. @ 12.5%		**Excludes:** As listed	

Retaining Walls

Height Feet	Structure Cost $/LF	Mobilization Design Constr. Mgt. $/LF	Total $/LF
4	$190	$70	$260
6	$260	$90	$350
8	$380	$140	$520
10	$430	$150	$580
12	$480	$170	$650
14	$590	$210	$800
16	$660	$240	$900

Excludes: Environmental Costs
Right of Way

12' High Sound Walls (Masonry Block on Footing)

Structure Cost $/Mile	Mobilization Design Constr. Mgt. $/Mile	Total $/Mile
$800,000	$300,000	$1,100,000

Widen Conventional Highway

1. Add one outside lane (Work includes earthwork, modify existing drainage system and construct AC shoulder section.	
Asphalt Concrete Pavement	$1,000,000/Mile
2. Add one outside lane each direction (Work includes earthwork, modify existing drainage system and construct AC shoulder section)	
Asphalt Concrete Pavement	$2,000,000/Mile
With Median Concrete Barrier	$2,200,000/Mile
With Median Double Thrie Beam Barrier	$2,300,000/Mile

Local Interchange Improvements

1. New Interchange	
Urban Interchange	$10,000,000 to $17,000,000
Partial – Cloverleaf Interchange (Work includes new OC structure, earthwork, signal)	$6,000,000
Diamond Interchange (Work includes new OC structure, earthwork, signal)	$5,000,000

Local Interchange Improvements CONT…		
2.	Reconstruct Existing Interchange	
	Realign and widen existing ramps (to 2 lanes)	$750,000/Each Ramp
	Construct Loop on – ramps (Does not include realigning existing ramp)	$700,000/Each Ramp
	Upgrade existing Diamond IC to Partial – Cloverleaf	$6,000,000
3.	Improve Existing Interchange	
	Widen ramps (From one to two lanes)	$350,000/Each Ramp
	Widen existing OC structure	$110/Sq. Ft.
	Signalize ramp intersection	$90,000/Location
	Upgrade existing signal at ramp terminal	$75,000/Intersection
	Upgrade existing signal at ramp terminal (Add lights only)	$25,000/Each
4.	Ramp Metering System	$60,000/Each location
Intersection Improvements		
1.	Signalization of local intersection (with some roadwork)	$250,000
2.	Upgrade existing intersection signalization	$75,000
3.	Upgrade existing Traffic Controller/Assembles	$40,000/Each
4.	Install new signal	$90,000/location
5.	Add signal heads	$25,000/Intersection
6.	Construct left – turn lane (240’ long)	$50,000/Each Location
7.	Street widening (12’ wide) (Pavement only)	$180,000/Mile
8.	Curb and gutter (Type A2-8)	$15/LF

Other Improvements		
1.	Construct new OC structure (Does not include roadway work)	$100/Sq. Ft.
2.	Construct Retaining Walls (Type 1)	$285/LF (H=8') $360/LF (H=10') $460/LF (H=12') $560/LF (H=14')
3.	Construct Soundwall	$1,000,000/Mile (H=12')
4.	Traffic Management Plan	10% of total construction costs

NOTE: This cost estimate does not include the following items:

1. R/W engineering, appraisal, acquisition and utilities relocation costs.
2. Minor items and supplemental work (10%).
3. Mobilization (10%).
4. Contingencies (25%).
5. Landscaping costs.

General Note: **When adding a through lane, the minimum distance is 600' approach and 600' departure to the next intersection.**

Kunzman Associates, Inc.

OVER 40 YEARS OF EXCELLENT SERVICE

1111 Town & Country Road, Suite 34
Orange, California 92868
(714) 973-8383

www.traffic-engineer.com

Kunzman Associates, Inc.

OVER 40 YEARS OF EXCELLENT SERVICE

1111 Town & Country Road, Suite 34
Orange, California 92868
(714) 973-8383

www.traffic-engineer.com