Terrible Herbst Travel Center

Transportation Impact Study

Prepared for
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Greenlight Traffic Engineering

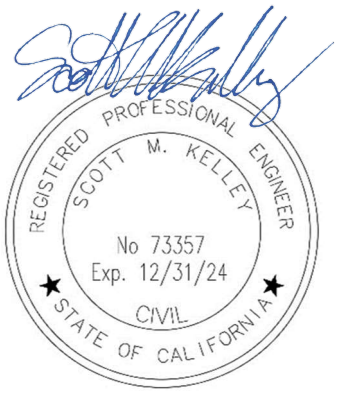
Submitted to
San Bernardino County

SAN BERNARDINO COUNTY

California Department of Transportation (Caltrans)

Caltrans

1st Submittal
January 26, 2024



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Executive Summary

Project Description

This report summarizes the findings of a traffic impact study for the proposed 8.2-acre property (APN 0570-061-26-0-000) that will be developed as Truck Stop Gas Station with 6 pumps (6 fuel dispensers) and a 7,433 SF Convenience Store and Gas Station with 16 vehicle fueling positions on the southeast corner of I-15 NB Ramp and Halloran Summit Road in San Bernardino (County), California. The Project also includes 2 EV charging stations. The Project will be constructed on a currently vacant lot and will utilize three new driveways on Halloran Summit Road.

The Project is forecast to generate approximately 531 Weekend AM peak hour trips, 531 Weekday PM peak hour trips, and 6,956 daily trips on a typical weekday.

Existing conditions, Existing With Project traffic, Opening Year (2025) Without Project and With Project traffic, and Horizon Year (2040) Without Project and With Project traffic conditions scenarios were analyzed.

Vehicle Miles Traveled (VMT) Analysis

Transit Priority Area Screening

Based on the SBCTA Screening Tool results, the Project site is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor. The TPA screening threshold is not met.

Low VMT Area Screening

The Project parcel was selected within the SBCTA Screening Tool to determine the TAZ VMT as compared to the County average. The County's impact threshold of "OD VMT per service population (SP)" is 44.7. The project is estimated to generate 194.5 VMT, which is 335.15% above General Plan Buildout VMT per SP. Low VMT Area screening criteria is not met.

Project Type Screening

As identified in the County and Caltrans Guidelines, projects which serve the local community such as K-12 schools, local-serving retail less than 50,000 square feet, local parks, day care centers, local serving gas stations, local serving banks, student housing projects, local serving community and other local, essential services may also be presumed to have a less than significant impact, as local-serving uses tend to shorten vehicle trips. Also, the Project generating less than 110 daily vehicle trips is also presumed to have a less than significant impact. The Project is located in a remote area with no major development planned in the vicinity of the Project and is forecast to generate approximately 531 Weekend AM peak hour trips, 531 Weekday PM peak hour trips, and 6,956 daily trips on a typical weekday The Project Type screening criteria is not met.

The Project is situated in a rural, unincorporated community in San Bernardino County, featuring a distinctive land use type not readily matched by those available in the VMT Tool for analyzing VMT results. The Project is expected to generate approximately 531 Weekend AM peak hour trips, 531 Weekday PM peak hour trips, and 6,956 daily trips on a typical weekday. However, all the trips are expected to be pass-by trips due to its remote location. It is expected that trips are only going to be diverted from I-15 and continue back to the original destination. It is highly unlikely that Project will be a final destination for the traffic along I-15.

The substantial generation of pass-by trips and the remote location of the Project indicate that the Project can be screened from VMT assessment.

Transportation Impact Study (TIS)

The following conclusions are based on the findings of the Project TIS:

1. The Project is forecast to generate approximately 531 Weekend AM peak hour trips, 531 Weekday PM peak hour trips, and 6,956 daily trips on a typical weekday.
2. Based on the capacity analysis performed, the study intersections are all expected to perform at an acceptable level of service for all scenarios with and without the Project. Therefore, no mitigations are recommended.
3. The VMT analysis shows that the project does not meet the Transit Priority Area Screening, Low VMT Area Screening and Project Type Screening. However, the substantial generation of pass-by trips and the remote location of the Project indicate that the Project can be screened from VMT assessment.

The below recommendations are suggested based on the study findings.

- Construct project improvements in accordance with San Bernardino County and Caltrans standards, as applicable.
- All roadway design, traffic signing and striping, street lighting, and traffic control improvements relating to the proposed Project should be constructed in accordance with applicable engineering standards and to the satisfaction of the San Bernardino County and Caltrans Traffic Engineering Division.
- The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable San Bernardino County/California Department of Transportation sight distance standards.
- Payment of applicable of local and regional development impact fees shall be paid to the San Bernardino County/Caltrans as applicable.

1.0 Introduction

This report summarizes the findings of a traffic impact study for the proposed 8.2-acre property (APN 0570-061-26-0-000) that will be developed as Truck Stop Gas Station and a Convenience Store and Gas Station (Project) land use on the southeast corner of I-15 NB Ramp and Halloran Summit Road in San Bernardino (County), California.

1.1 Proposed Development

The proposed Project will consist of Institute of Transportation Engineers (ITE) Land Use 950 "Truck Stop" with 6 pumps (6 fuel dispensers) and Land Use 945 "Convenience Store/Gas Station - GFA (5.5-10k)" of 7,433 SF with 16 vehicle fueling positions. The Project also includes 2 EV charging stations.

The Project is forecast to generate approximately 531 Weekend AM peak hour trips, 531 Weekday PM peak hour trips, and 6,956 daily trips on a typical weekday.

Project access to the surrounding roadway network will be provided via three full access driveways on Halloran Summit Road. Figure 1 and Figure 2 depict the Project vicinity and site plan, respectively.

Existing conditions, Existing With Project traffic, Opening Year (2025) Without Project and With Project traffic, and Horizon Year (2040) Without Project and With Project traffic conditions scenarios were analyzed. Analysis conclusions and recommendations are summarized at the end of the report. The traffic study scoping was discussed and approved by the San Bernardino County and California Department of Transportation (Caltrans) and is attached as Appendix A**.**

1.2 Study Objectives

The objectives of this study were:

1. To estimate the expected volumes on the roadway network adjacent to the site;
2. To analyze the current and future traffic operations;
3. To estimate project traffic generation/distribution/assignment;
4. To address site-specific concerns;
5. To perform Vehicle Miles Traveled (VMT) Assessment; and,
6. To satisfy the requirements set forth by the San Bernardino County's Transportation Impact Study Guidelines.

1.3 Study Area

The study intersections are:

1. Halloran Summit Road/I-15 NB Ramp
2. Halloran Summit Road/I-15 SB Ramp
3. Halloran Summit Road/Driveway 1
4. Halloran Summit Road/Driveway 2
5. Halloran Summit Road/Driveway 3

These intersections were analyzed for the following study scenarios:

- Existing conditions;
- Existing With Project conditions;
- Opening Year (2025) Without Project conditions;
- Opening Year (2025) With Project conditions;
- Horizon Year (2040) Without Project conditions; and
- Horizon Year (2040) With Project conditions;

Figure 3 shows the study area roadway network and study intersections.

Figure 1: Vicinity Map

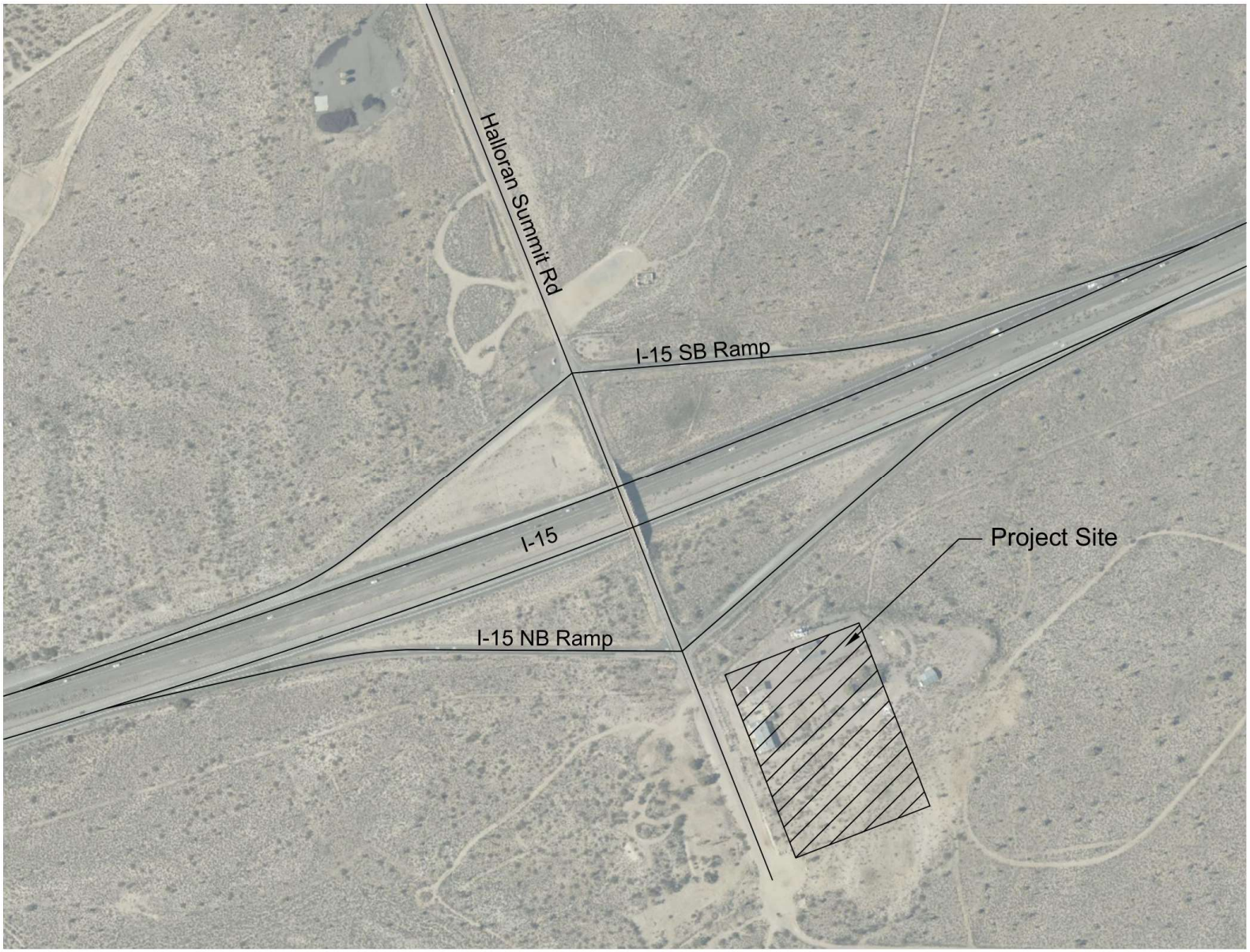
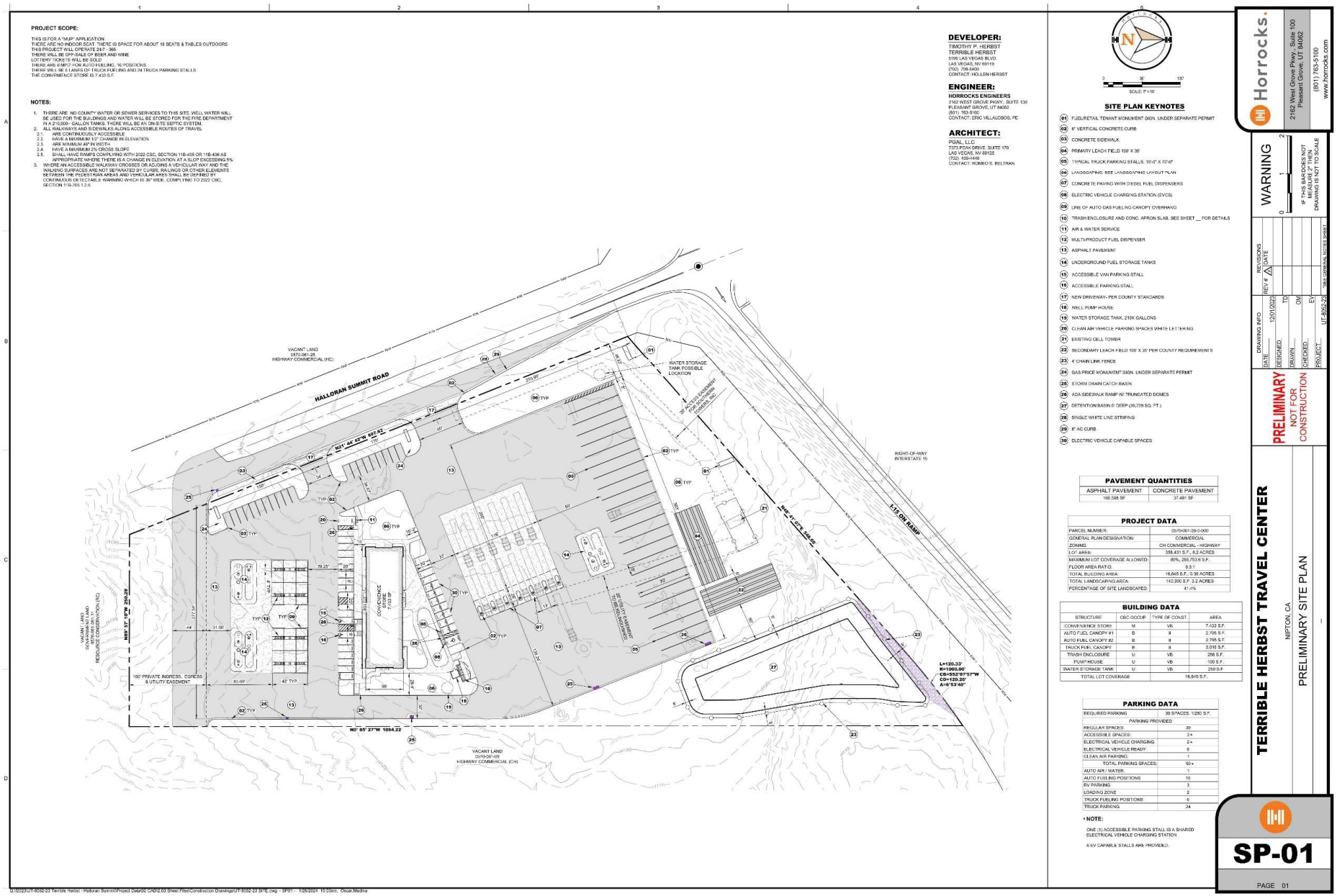


Figure 2: Site Plan



PAVEMENT QUANTITIES

ASPHALT PAVEMENT	CONCRETE PAVEMENT
166,588 SF	37,491 SF

PROJECT DATA

PARCEL NUMBER:	0370-081-26-0-000
GENERAL PLAN DESIGNATION:	COMMERCIAL
ZONING:	CH COMMERCIAL - HIGHWAY
LOT AREA:	358,431 S.F., 8.2 ACRES
MAXIMUM LOT COVERAGE ALLOWED:	80%, 286,763.6 S.F.
FLOOR AREA RATIO:	0.5:1
TOTAL BUILDING AREA:	16,645 S.F., 0.38 ACRES
TOTAL LANDSCAPING AREA:	140,900 S.F. 3.2 ACRES
PERCENTAGE OF SITE LANDSCAPED:	41.4%

BUILDING DATA

STRUCTURE	CBC OCCUP.	TYPE OF CONST.	AREA
CONVENIENCE STORE	M	VB	7,433 S.F.
AUTO FUEL CANOPY #1	B	II	2,795 S.F.
AUTO FUEL CANOPY #2	B	II	2,795 S.F.
TRUCK FUEL CANOPY	B	II	3,016 S.F.
TRASH ENCLOSURE	U	VB	256 S.F.
PUMP HOUSE	U	VB	100 S.F.
WATER STORAGE TANK	U	VB	250 S.F.
TOTAL LOT COVERAGE			16,645 S.F.

PARKING DATA

REQUIRED PARKING	30 SPACES, 1/250 S.F.
PARKING PROVIDED	
REGULAR SPACES:	39
ACCESSIBLE SPACES:	3 *
ELECTRICAL VEHICLE CHARGING:	2 *
ELECTRICAL VEHICLE READY:	6
CLEAN AIR PARKING:	1
TOTAL PARKING SPACES:	50 *
AUTO AIR / WATER:	1
AUTO FUELING POSITIONS	16
RV PARKING	3
LOADING ZONE	2
TRUCK FUELING POSITIONS	6
TRUCK PARKING	74

* NOTE:
ONE (1) ACCESSIBLE PARKING STALL IS A SHARED ELECTRICAL VEHICLE CHARGING STATION
6 EV CAPABLE STALLS ARE PROVIDED.

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WARNING
IF THIS BAR DOES NOT MEASURE 1" THE DRAWING IS NOT TO SCALE

REVISIONS
REV # | DATE

DRAWING INFO
DATE: 12/01/2023
DESIGNED: TD
DRAWN: OM
CHECKED: EV
PROJECT: UT-8082.23

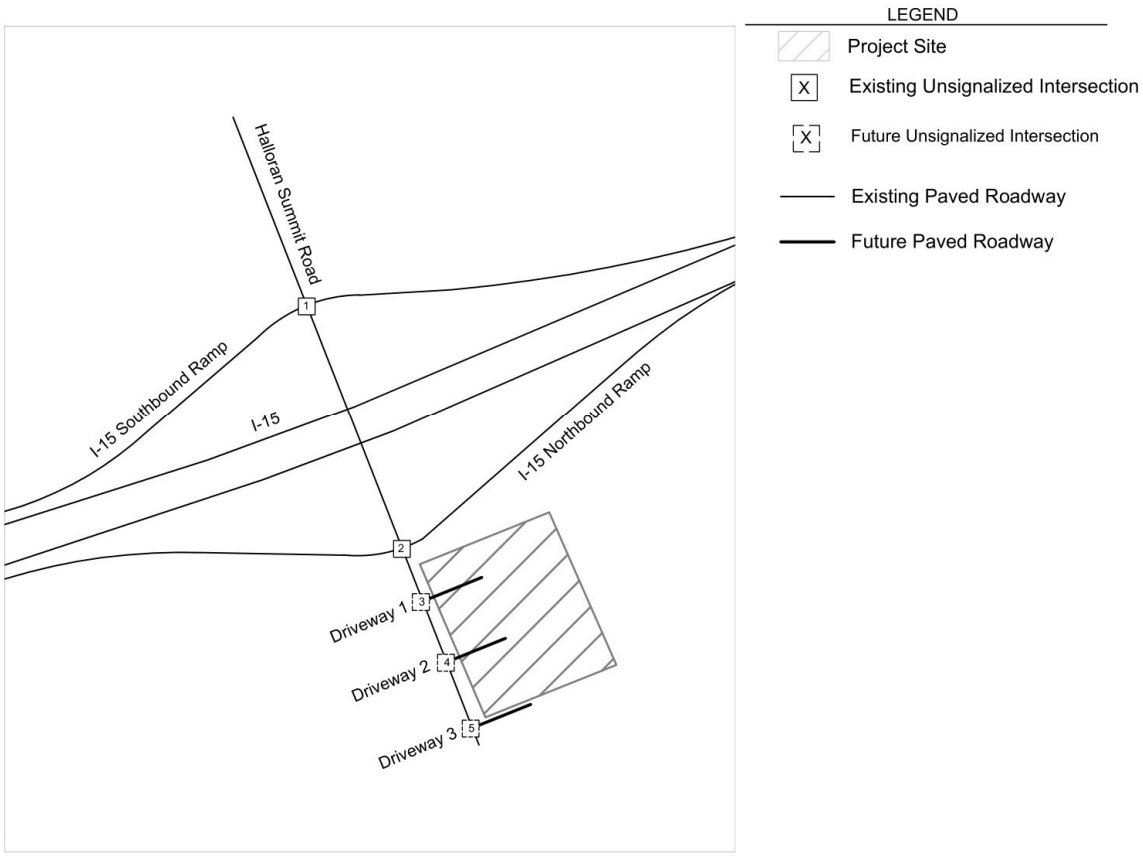
SEE GENERAL NOTES SHEET

PRELIMINARY
NOT FOR CONSTRUCTION

TERRIBLE HERBST TRAVEL CENTER
NIPTON, CA
PRELIMINARY SITE PLAN

SP-01
PAGE 01

Figure 3: Study Area



1.4 Analysis Methodology

This study was performed in accordance with the San Bernardino County's Transportation Impact Study Guidelines. Intersection Level of Service (LOS) was performed for Weekend AM and Weekday PM peak hours of Existing, Existing With Project conditions, opening year Without Project and With Project traffic scenarios, and horizon year Without Project and With Project traffic scenarios.

1.4.1 Intersection Level of Service Analysis and Performance Threshold

LOS is a qualitative description of the traffic conditions at an intersection. Intersection LOS results are dependent upon the type of intersection control and the delay experienced at the intersection. Vistro 2023 traffic analysis software was used to perform study intersection LOS calculations using the Highway Capacity Manual 6th Edition (HCM6) analysis methodology. The HCM methodology assigns an LOS value varying from LOS A (free-flow conditions) to LOS F (heavily congested conditions) to an intersection based on the delay experienced at the intersection. The delay and corresponding LOS values from the HCM are shown in Table 1.

Table 1: Intersection LOS Delay Values and Description

LOS	Control Delay per Vehicle (seconds/vehicle)		Level of Service Description
	Signalized Intersection	Unsignalized Intersection	
A	0-10	0-10	Little or no delay
B	>10-20	>10-15	Short traffic delays
C	>20-35	>15-25	Average traffic delays
D	>35-55	>25-35	Long traffic delays
E	>55-80	>35-50	Very long traffic delays
F	>80	>50	Severe congestion

According to the San Bernardino County Transportation Impact Study Guidelines, dated July 2019, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours. Therefore, any intersection operating at LOS E or LOS F is considered deficient/unsatisfactory.

All Vistro 2023 analysis summary sheets are provided in Appendix C.

2.0 Existing Conditions

2.1 Roadways

I-15 Ramps is a paved, northeast-southeast paved roadway with one lane in each direction. The existing cross section includes pavement and aggregate shoulder on both sides of the roadway. The speed limit is not posted on the I-15 ramps. I-15 Ramps are classified as Interstate on the Caltrans California Road System – Functional Classification.

Halloran Summit Road is a paved, 2-lane undivided roadway with one through lane in each direction with. The existing cross section includes pavement and aggregate shoulder on both sides of the roadway. The speed limit is not posted on Halloran Summit Road. Halloran Summit Road is classified as a Local roadway on the Caltrans California Road System – Functional Classification.

2.2 Intersections

I-15 NB Ramp/Halloran Summit Road is a four-leg unsignalized intersection, with the stop controlled on the eastbound approach. The northbound approach on Halloran Summit Road consists of one shared through/right-turn lane. The southbound approach on Halloran Summit Road consists of one shared left-turn/through lane.

The eastbound approach consists of one shared left-turn/through/right-turn lane. The east leg consists of one inbound lane.

I-15 SB Ramp/Halloran Summit Road is a four-leg unsignalized intersection, with the stop controlled on the westbound approach. The northbound approach on Halloran Summit Road consists of one shared through/left-turn lane. The southbound approach on Halloran Summit Road consists of one shared through/right-turn lane. The westbound approach consists of one shared left-turn/through/right-turn lane. The west leg consists of one inbound road.

The existing lane geometry at the study intersections is summarized in Figure 4.

2.3 Roadway Safety

Crash data was obtained for the study area from Caltrans from Year April 01, 2020 – March 31, 2023. Two crashes were documented within the I-15 NB Ramp during this period, with no reported fatalities. The recorded collision types encompassed rear-end incidents and collisions with objects. The observed crash factor was identified as an Improper Turn.

Crash data results are provided in Appendix F.

2.4 Existing Traffic Volumes

Sunday AM peak hour turning movement volumes were collected between 12:00 to 3:00 p.m. on Sunday, December 3, 2023, and Friday PM peak hour turning volumes were collected between 4:00 to 6:00 p.m. on Friday, December 1, 2023, at the intersections of:

- I-15 NB Ramp/Halloran Summit Road
- I-15 SB Ramp/Halloran Summit Road

The existing peak hour traffic volumes are summarized in Figure 5. The traffic count data sheets are provided in Appendix B.

3.0 Proposed Project

The proposed Project will consist of Institute of Transportation Engineers (ITE) Land Use 950 “Truck Stop” with 6 pumps (6 fuel dispensers) and Land Use 945 “Convenience Store/Gas Station - GFA (5.5-10k)” of 7,433 SF with 16 vehicle fueling positions. The Project also includes 2 EV charging stations.

3.1 Site Access

Project access to the surrounding roadway network will be provided via three full access driveways off Halloran Summit Road.

3.2 Trip Generation

The Project is forecast to generate approximately 531 Weekend AM peak hour trips, 531 Weekday PM peak hour trips, and 6,956 daily trips on a typical weekday.

The assumptions used for calculating the trip generation for the Project are:

- The trip generation rates for the Weekday PM peak hour was utilized for the Weekend AM peak hour per the direction from County Engineer.
- There is no ITE LUC code for EV Charging Station. It is assumed that a vehicle takes approximately 30 minutes to charge at the EV Charging Station. Therfore, an average rate of 4 cars per hour was utilized to calculate the trips generated by the EV Charging Station.

Calculated trip values based on the above mentioned study are shown in Table 2. The complete Project trip generation calculation sheet is shown in Appendix D.

Table 2: Project Trip Generation

Land Use	Size	Unit	AM Peak Hour			PM Peak Hour			Daily Volume
			In	Out	Total	In	Out	Total	
Convenience Store/Gas Station - GFA (5.5-10k)	16.00	Fueling Positions	215	215	430	215	215	430	5,532
Truck Stop	6.00	Fueling Positions	49	44	93	49	44	93	1,344
EV Charging Station	2.00	Charging Station	4	4	8	4	4	8	80[1]
Total New Trips Ends			**268**	**263**	**531**	**268**	**263**	**531**	**6,956**

1. *Daily Volume = PM Peak Hour Volume/0.1*

3.3 Trip Distribution

The site-generated trips were distributed across the study area roadway network using the percentages shown in Table 3. The trip distribution was approved by the San Bernardino County and Caltrans and is attached as Appendix A.

Table 3: Project Trip Distribution

Roadway	Segment	From Site	To Site
I-15	West of Halloran Summit Road	50%	50%
I-15	East of Halloran Summit Road	50%	50%

3.4 Trip Assignment

Site-generated trips were assigned to Project entrance and exit points based on available and reasonable routes. Site-generated trips are shown in Figure 6.

The Existing with Project traffic volumes are shown in Figure 7.

Figure 4: Existing Roadway Geometry

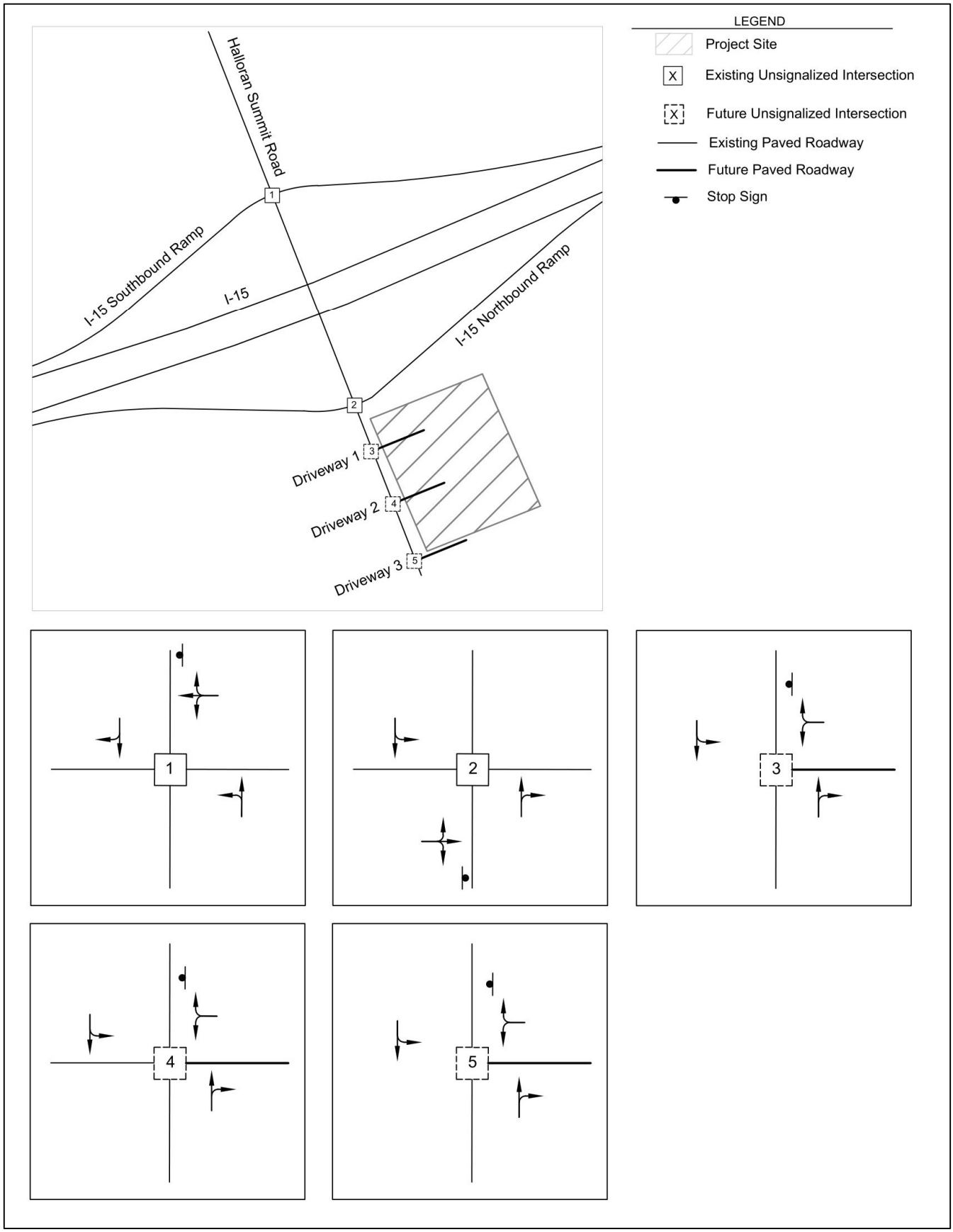


Figure 5: Existing Traffic Volumes

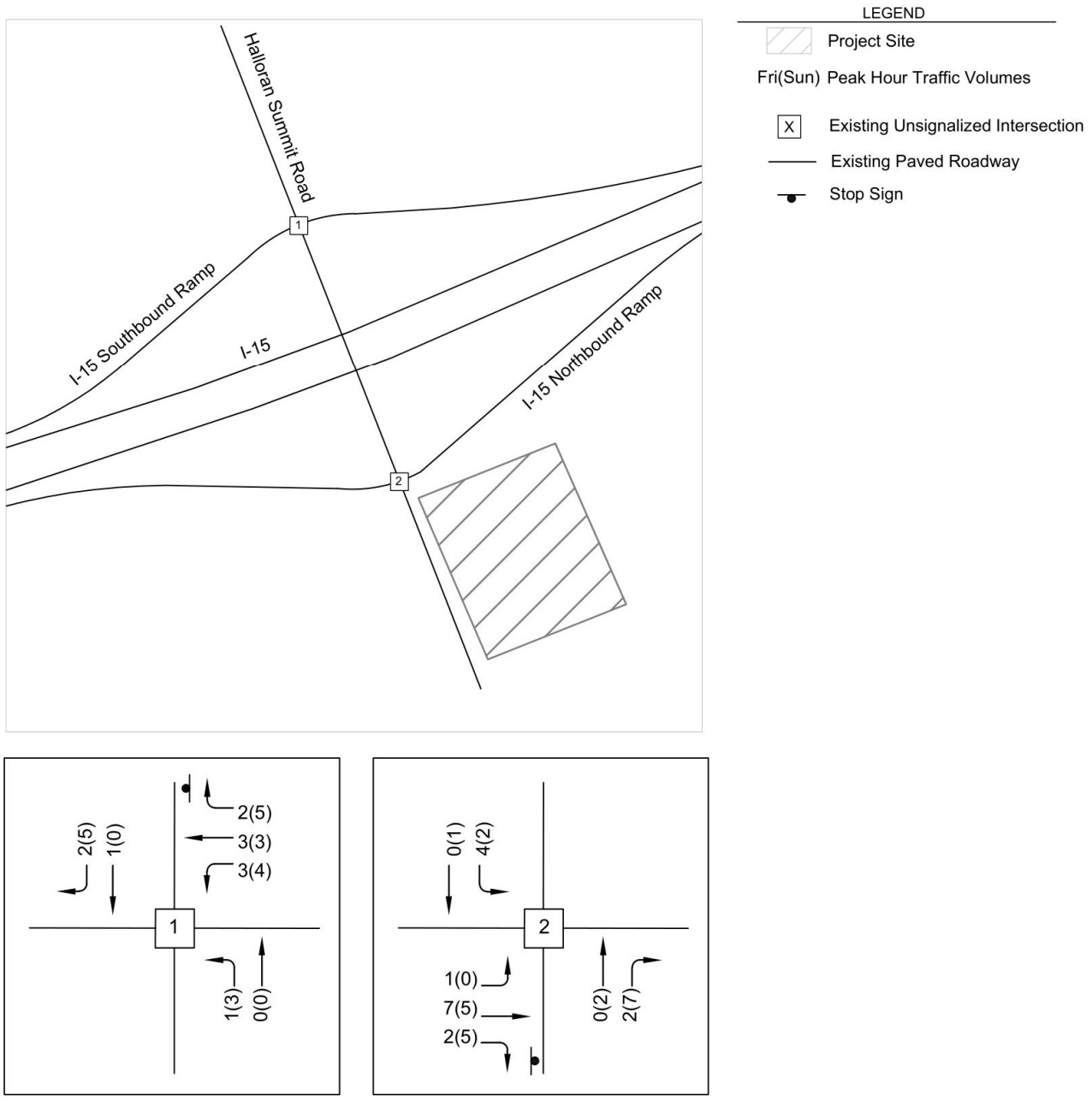


Figure 6: Site-Generated Trip Assignment

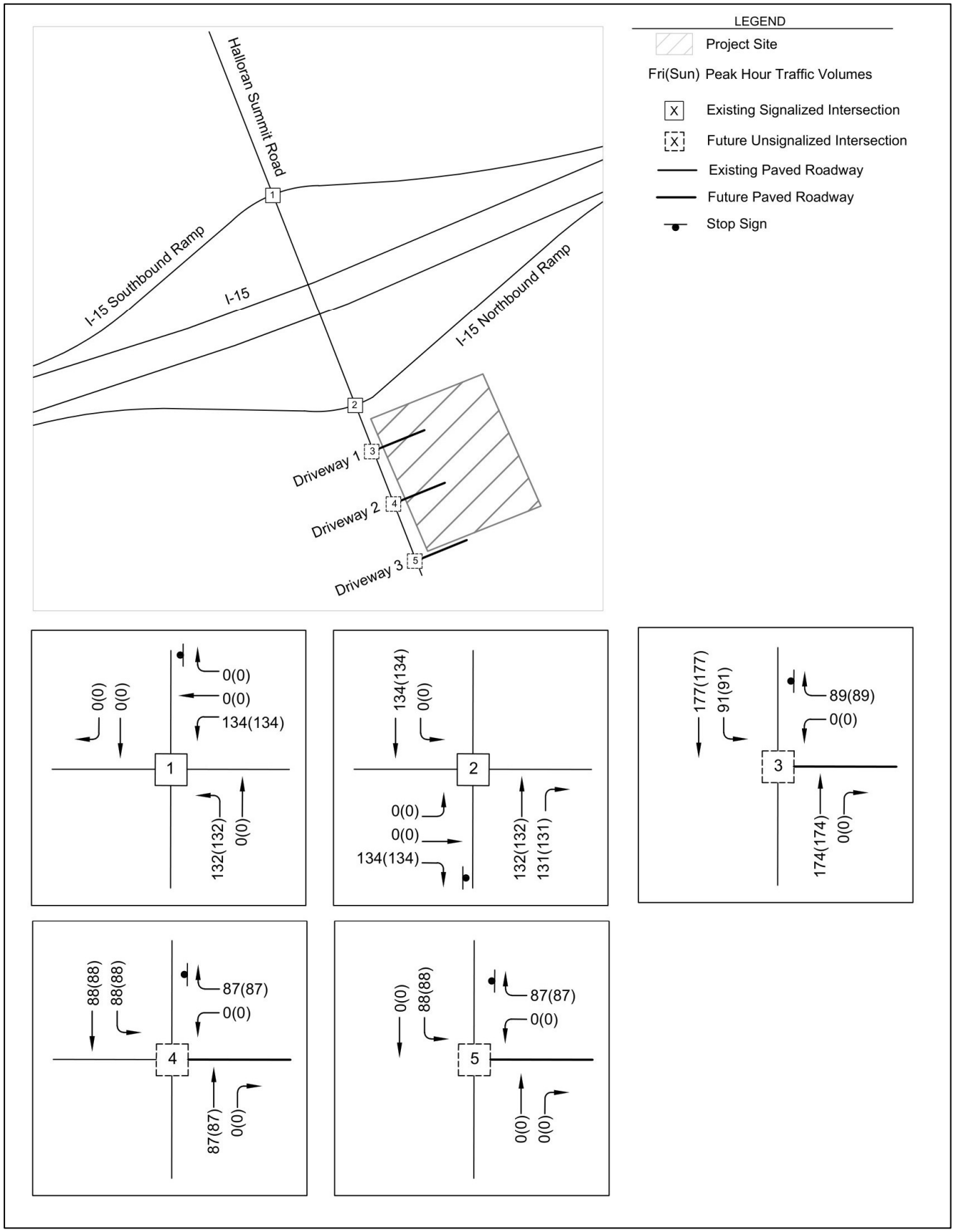
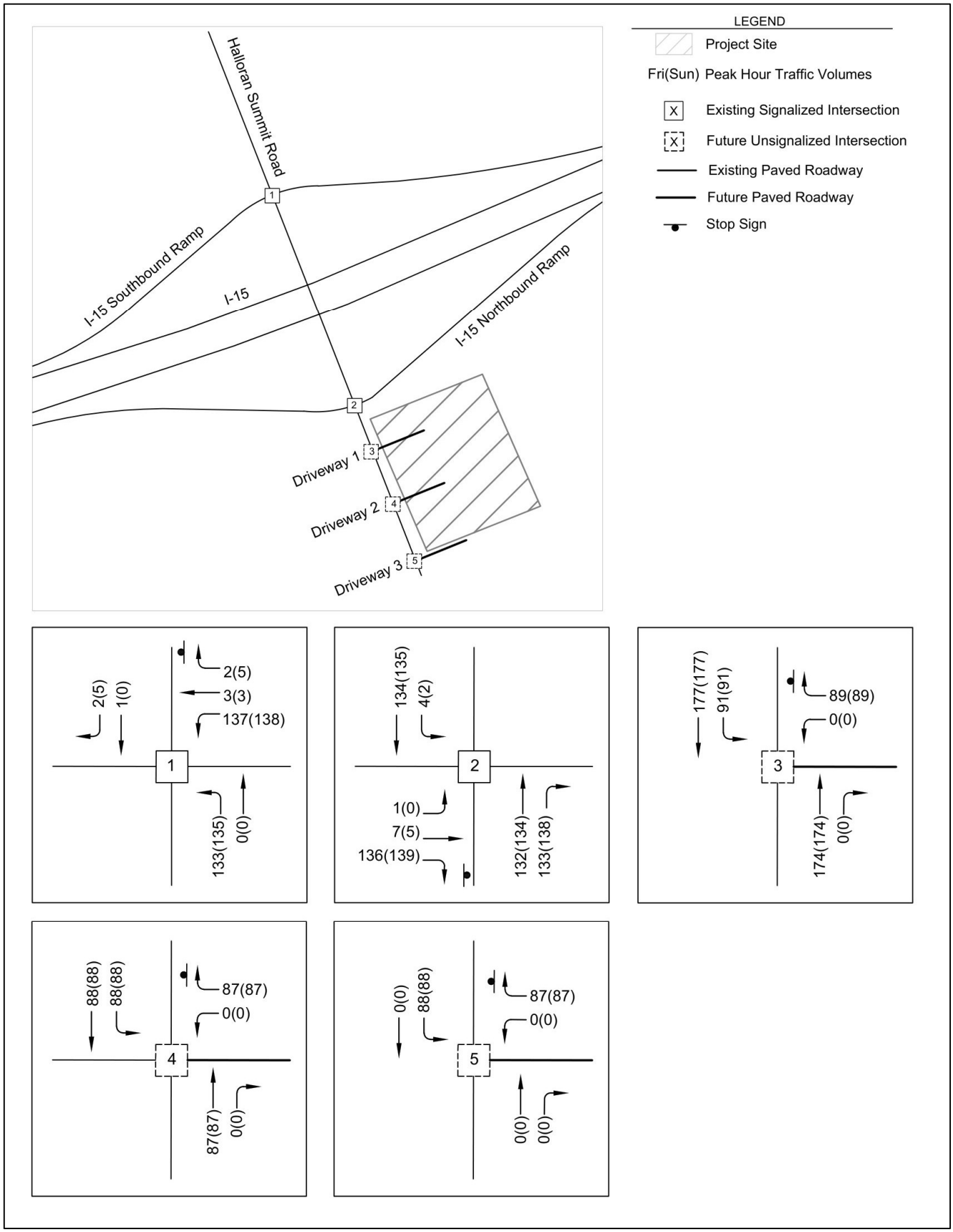


Figure 7: Existing With Project Traffic Volumes



3.5 Existing Level of Service Analysis

Table 4 summarizes LOS results for the existing Friday PM and Sunday AM peak hour conditions with and without the Project.

Table 4: Existing Peak Hour Intersection LOS

Int. No.	Movement	2023 Existing				2023 Existing + Project			
		Friday PM Peak		Sunday AM Peak		Friday PM Peak		Sunday AM Peak	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Unsignalized Intersections									
One Way Stop Controlled									
1	**Halloran Summit Road/I-15 SB Ramp**								
	NBL	A	7.2	A	7.2	A	7.5	A	7.5
	WBL	A	8.6	A	8.6	B	14.5	B	14.7
	WBT	A	9.1	A	9.2	B	14.8	C	15.1
	WBR	A	8.4	A	8.4	B	11.3	B	11.5
2	**Halloran Summit Road/I-15 SB Ramp**								
	SBL	A	7.2	A	7.2	A	7.9	A	8.0
	EBL	A	8.6	NA	NA	B	12.9	NA	NA
	EBT	A	9.2	A	9.2	B	13.9	B	13.9
	EBR	A	8.4	A	8.4	B	10.3	B	10.2
3	**Halloran Summit Road/Driveway 1**								
	SBL					A	7.7	A	7.7
	WBL/R					A	9.8	A	9.8
4	**Halloran Summit Road/Driveway 2**								
	SBL					A	7.5	A	7.5
	WBL/R					A	9.2	A	9.2
5	**Halloran Summit Road/Driveway 3**								
	SBL					A	7.4	A	7.4
	WBL/R					A	8.6	A	8.6

As shown in Table 4, the existing study intersections are performing at an acceptable LOS for existing Friday PM and Sunday AM peak hours with and without the Project.

4.0 Traffic Improvements Analysis

4.1 Traffic Forecasting

4.1.1 Ambient Growth Traffic

Non-site traffic forecasting accounts for ambient growth of vehicle trips that occur on the roadway network adjacent to the Project site.

The existing traffic volumes were increased with a compounding growth rate of 2% per year to obtain the Opening Year (2025) and Horizon Year (2040) traffic volumes. The growth rate was approved by the San Bernardino County and Caltrans and is attached as Appendix A.

4.2 Level of Service Analysis

4.2.1 Year 2025 LOS

The Year 2025 Without Project and With Project traffic volumes are shown on Figure 8 and Figure 9.

Table 5 summarizes LOS results for the Year 2025 Friday PM and Sunday AM peak hour conditions with and without the Project.

Table 5: Year 2025 Peak Hour Intersection LOS

Int. No.	Movement	2025 Without Project				2025 With Project			
		Friday PM Peak		Sunday AM Peak		Friday PM Peak		Sunday AM Peak	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Unsignalized Intersections									
One Way Stop Controlled									
1	**Halloran Summit Road/I-15 SB Ramp**								
	NBL	A	7.2	A	7.2	A	7.5	A	7.5
	WBL	A	8.6	A	8.6	B	14.5	B	14.7
	WBT	A	9.1	A	9.2	B	14.8	C	15.1
	WBR	A	8.4	A	8.4	B	11.3	B	11.5
2	**Halloran Summit Road/I-15 SB Ramp**								
	SBL	A	7.2	A	7.2	A	7.9	A	8.0
	EBL	A	8.6	NA	NA	B	12.9	NA	NA
	EBT	A	9.2	A	9.2	B	13.9	B	13.9
	EBR	A	8.4	A	8.4	B	10.3	B	10.2
3	**Halloran Summit Road/Driveway 1**								
	SBL					A	7.7	A	7.7
	WBL/R					A	9.8	A	9.8
4	**Halloran Summit Road/Driveway 2**								
	SBL					A	7.5	A	7.5
	WBL/R					A	9.1	A	9.2
5	**Halloran Summit Road/Driveway 3**								
	SBL					A	7.4	A	7.4
	WBL/R					A	8.6	A	8.6

As shown in Table 5, the study intersections are performing at an acceptable LOS for Year 2025 Friday PM and Sunday AM peak hours with and without the Project.

Figure 8: Year 2025 Without Project Traffic Volumes

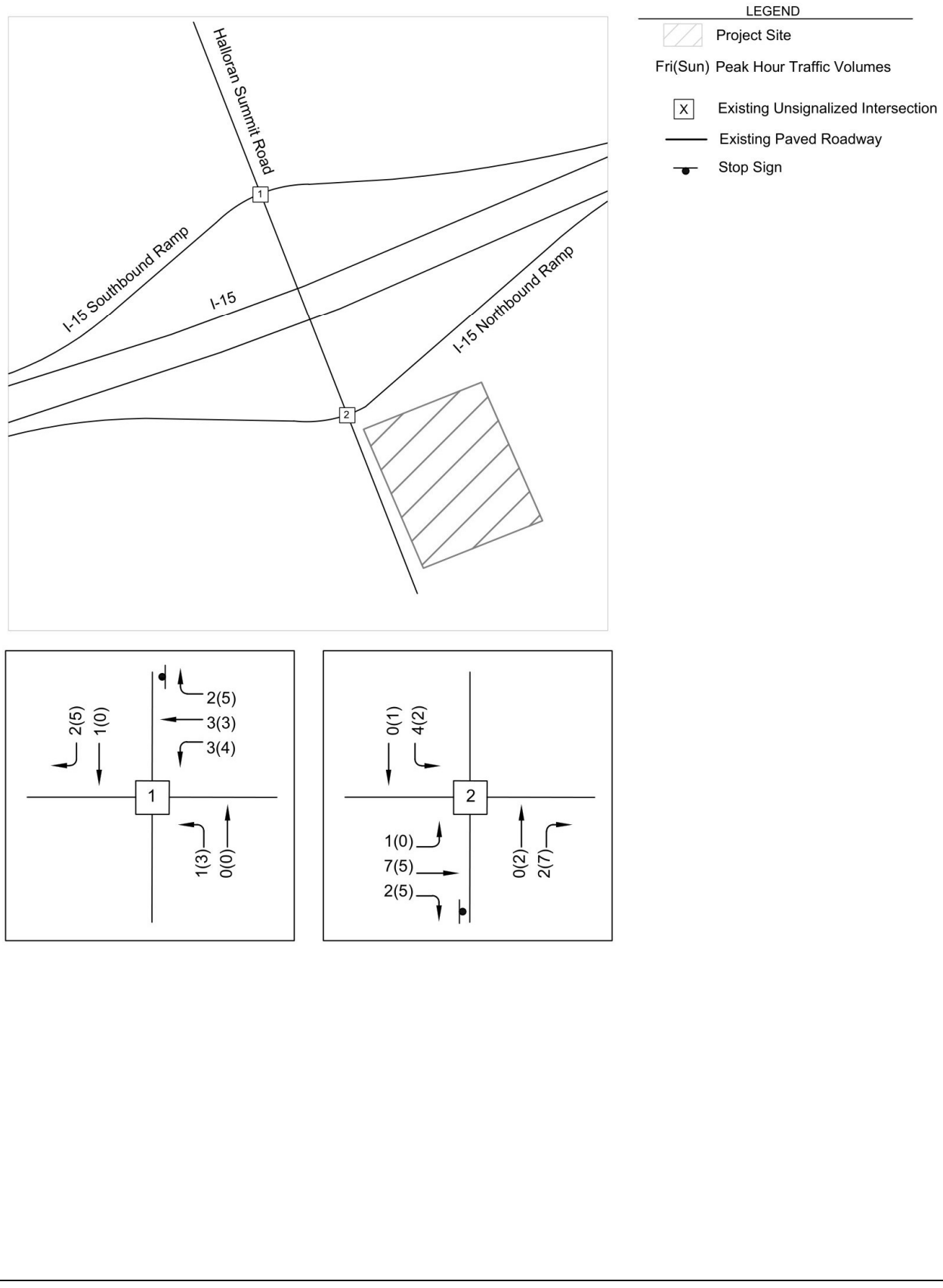
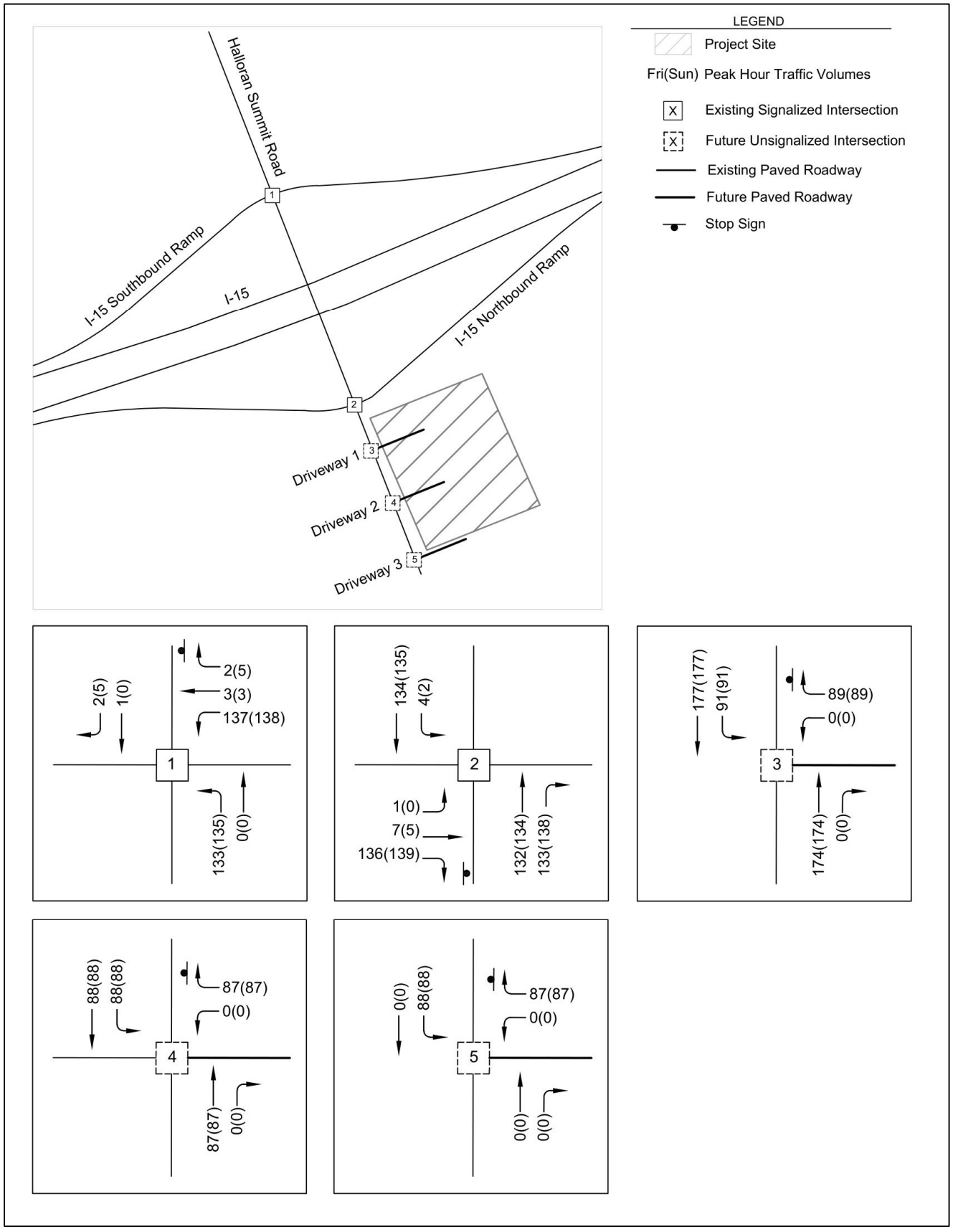


Figure 9: Year 2025 With Project Traffic Volumes



4.2.2 Year 2040 LOS

The Year 2040 Without Project and With Project traffic volumes are shown on Figure 10and Figure 11.

Table 5 summarizes LOS results for the Year 2040 Friday PM and Sunday AM peak hour conditions with and without the Project.

Table 6: Year 2040 Peak Hour Intersection LOS

Int. No.	Movement	2040 Without Project				2040 With Project			
		Friday PM Peak		Sunday AM Peak		Friday PM Peak		Sunday AM Peak	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Unsignalized Intersections									
One Way Stop Controlled									
1	**Halloran Summit Road/I-15 SB Ramp**								
	NBL	A	7.2	A	7.2	A	7.5	A	7.5
	WBL	A	8.6	A	8.7	B	14.6	B	14.9
	WBT	A	9.1	A	9.2	B	14.9	C	15.3
	WBR	A	8.4	A	8.4	B	11.4	B	11.6
2	**Halloran Summit Road/I-15 SB Ramp**								
	SBL	A	7.2	A	7.3	A	7.9	A	8.0
	EBL	A	8.7	NA	NA	B	13.1	NA	NA
	EBT	A	9.2	A	9.2	B	14.1	B	14.0
	EBR	A	8.4	A	8.4	B	10.4	B	10.3
3	**Halloran Summit Road/Driveway 1**								
	SBL					A	7.7	A	7.7
	WBL/R					A	9.8	A	9.8
4	**Halloran Summit Road/Driveway 2**								
	SBL					A	7.5	A	7.5
	WBL/R					A	9.2	A	9.2
5	**Halloran Summit Road/Driveway 3**								
	SBL					A	7.4	A	7.4
	WBL/R					A	8.6	A	8.6

As shown in Table 5, the study intersections are performing at an acceptable LOS for Year 2040 Friday PM and Sunday AM peak hours with and without the Project.

Figure 10: Year 2040 Without Project Traffic Volumes

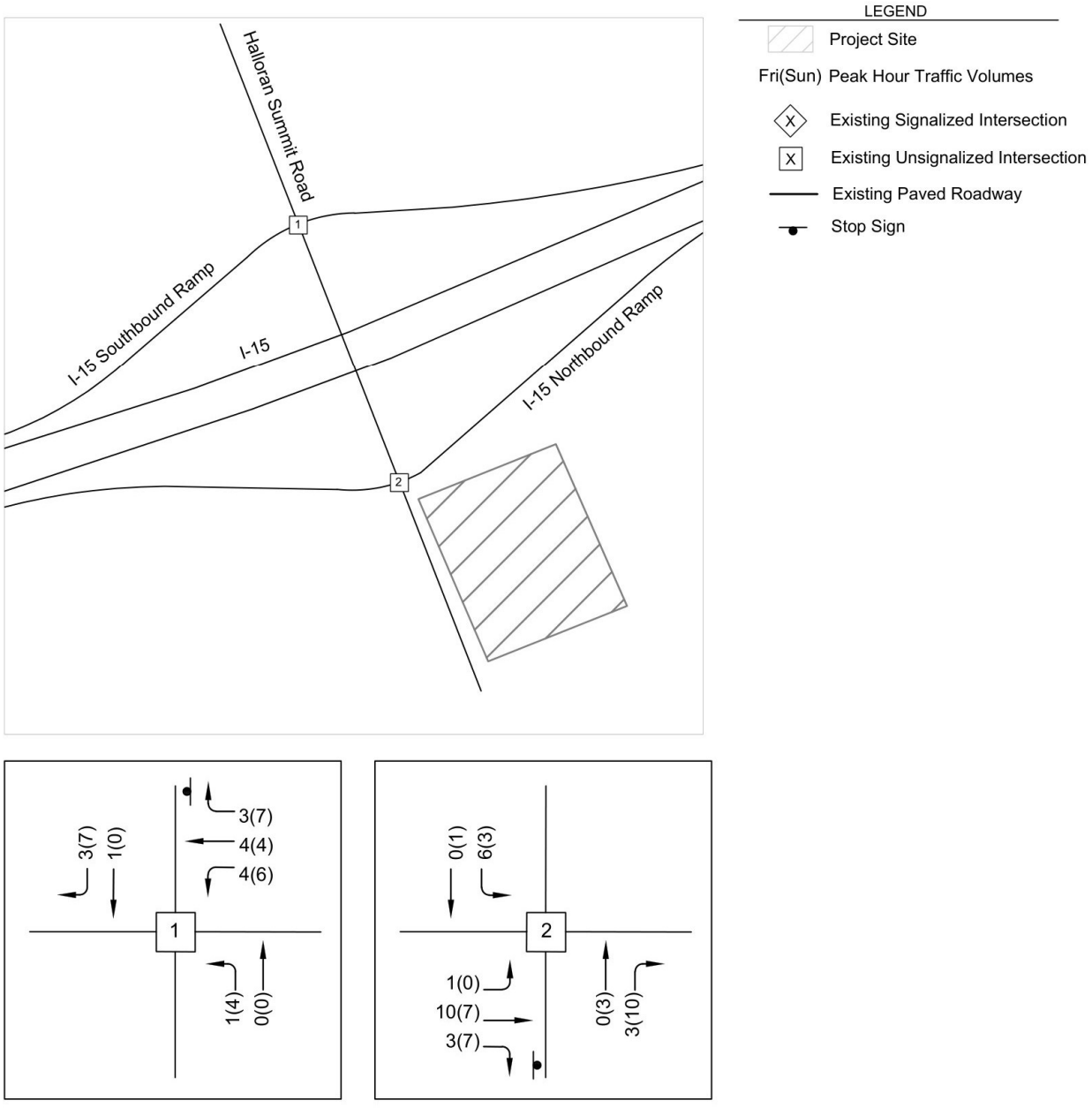
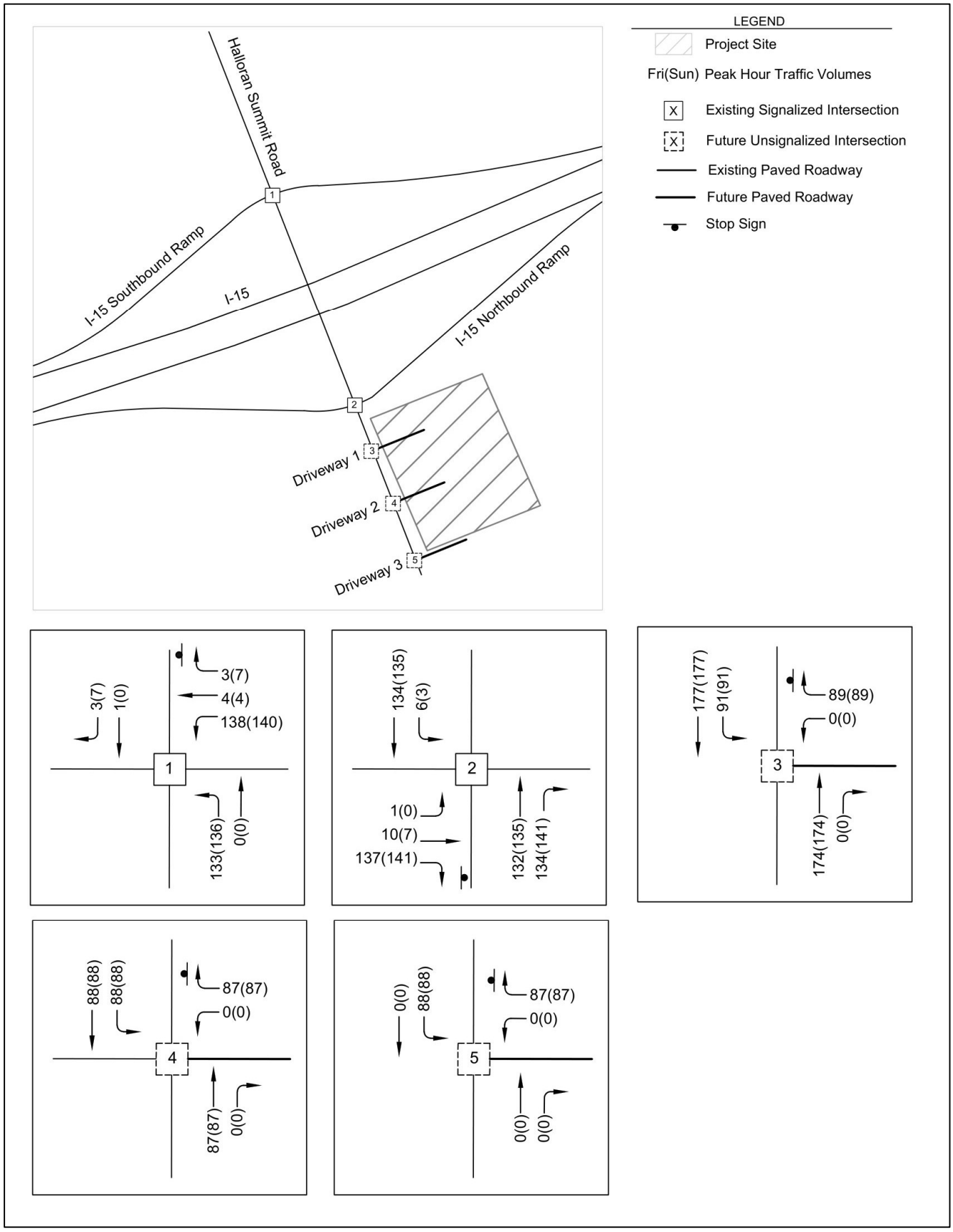


Figure 11: Year 2040 With Project Traffic Volumes



5.0 Vehicle Miles Traveled (VMT) Analysis

The California Environmental Quality Act (CEQA) Guidelines were revised in December 2018 to require all lead agencies to use VMT instead of automobile delay-based level of service (LOS) as the new way of identifying transportation impacts for land use projects. A Technical Advisory on Evaluating Transportation Impacts in CEQA was issued by the Governor's Office of Planning and Research (OPR) in December 2018 to guide this process.

A VMT analysis was performed for the proposed 8.2-acre property (*APN 0570-061-26-0-000*) that will be developed as Truck Stop Gas Station and a Convenience Store and Gas Station (*Project No.: PROJ-2023-00036; Record No.: TRSTY-2023-00017*) land use on the southeast corner of I-15 NB Ramp and Halloran Summit Road, in San Bernardino (County), California.

This analysis utilized the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool (Screening Tool) to evaluate the VMT for this Project. The County and Caltrans guidelines list the following screening to determine if a presumption of a less than significant transportation impact can be made:

- Transit Priority Area (TPA) Screening
- Project Type Screening
- Low VMT Screening

5.1 Transit Priority Area Screening

The County guidelines describes that projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop"[1] or an existing stop along a "high-quality transit corridor"[2]) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Based on the Screening Tool results presented in Appendix E, the Project site is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

The TPA screening threshold is not met.

5.2 Low VMT Area Screening

As noted in the County Guidelines "Project located within a low VMT generating area as determined by the analyst (e.g. development in efficient areas of the County will reduce VMT per person/employee and is beneficial

[1] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

[2] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

to the region." SBCTA uses the sub-regional San Bernardino Transportation Analysis Model (SBTAM) to measure VMT performance within individual traffic analysis zones (TAZ's) in the region.

The Project parcel was selected within the SBCTA Screening Tool to determine the TAZ VMT as compared to the County average. The County's impact threshold of "Origin-Destination (OD) VMT per service population (SP)" is 44.7. The project is estimated to generate 194.5 VMT, which is 335.15% above General Plan Buildout VMT per SP.

Low VMT Area screening criteria is not met.

5.3 Project Type Screening

As identified in the County Guidelines, projects which serve the local community such as K-12 schools, local-serving retail less than 50,000 square feet, local parks, day care centers, local serving gas stations, local serving banks, student housing projects, local serving community and other local, essential services may also be presumed to have a less than significant impact, as local-serving uses tend to shorten vehicle trips.

Also, the Project generating less than 110 daily vehicle trips are also presumed to have a less than significant impact. The Project is forecast to generate approximately 515 Weekend AM peak hour trips, 515 Weekday PM peak hour trips, and 6,732 daily trips on a typical weekday.

The Project Type screening criteria is not met.

The analysis shows that the Project does not meet the Transit Priority Area Screening, Low VMT Area Screening and Project Type Screening.

5.4 Project VMT

The VMT Tool can be used in conjunction with the VMT Screening Tool to help evaluate whether a proposed land use project can be screened from full VMT analysis. However, it is important to note that the VMT results generated by the tool rely on static outputs from SBTAM. As such, the tool may not offer sufficient sensitivity for evaluating all projects. The most accurate project VMT estimates are obtained for small to moderate-sized projects without atypical or unusual land use types. Users are advised to exercise professional judgment when assessing the tool's appropriateness and reasonableness for application on individual projects.

The Project is situated in a rural, unincorporated community in San Bernardino County, featuring a distinctive land use type not readily matched by those available in the VMT Tool for analyzing VMT results. The Project is expected to generate approximately 515 Weekend AM peak hour trips, 515 Weekday PM peak hour trips, and 6,732 daily trips on a typical weekday. However, all the trips are expected to be pass-by trips due to its remote location. It is expected that trips are only going to be diverted from I-15 and continue back to the original destination. It is highly unlikely that Project will be a final destination for the traffic along I-15.

Also, Technical Advisory on Evaluating Transportation Impacts In CEQA (December 2018), used by County and Caltrans, states "*Section 15125, subdivision (d), of the CEQA Guidelines provides that lead agencies should analyze impacts resulting from inconsistencies with regional plans, including regional transportation plans. For this reason, if a project is inconsistent with the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), the lead agency should evaluate whether that inconsistency indicates a significant impact on transportation.*" Despite the Project's inconsistency with the RTP/SCS, this disparity does not suggest any significant impact on transportation as most of the trips expected are going to be pass-by trips.

Therefore, the substantial generation of pass-by trips and the remote location of the Project indicate that the Project can be screened from VMT assessment.

6.0 Conclusions

The following conclusions are based on the findings of the Project TIS:

1. The Project is forecast to generate approximately 531 Weekend AM peak hour trips, 531 Weekday PM peak hour trips, and 6,956 daily trips on a typical weekday.
2. Based on the capacity analysis performed, the study intersections are all expected to perform at an acceptable level of service for all scenarios with and without the Project. Therefore, no mitigations are recommended.
3. The VMT analysis shows that the project does not meet the Transit Priority Area Screening, Low VMT Area Screening and Project Type Screening. However, the substantial generation of pass-by trips and the remote location of the Project indicate that the Project can be screened from VMT assessment.

7.0 Recommendations

The below recommendations are suggested based on the study findings.

- Construct project improvements in accordance with San Bernardino County and Caltrans standards, as applicable.
- All roadway design, traffic signing and striping, street lighting, and traffic control improvements relating to the proposed Project should be constructed in accordance with applicable engineering standards and to the satisfaction of the San Bernardino County and Caltrans Traffic Engineering Division.
- The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable San Bernardino County/California Department of Transportation sight distance standards.
- Payment of applicable of local and regional development impact fees shall be paid to the San Bernardino County/Caltrans as applicable.

Appendix A: San Bernardino County & Caltrans Scope of Study

SCOPE FOR TRAFFIC STUDY

Project Name:	PROJ-2023-00036 Terrible Herbst Truck Stop

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:
Available on the Department of Public Works Website:
http://cms.sbcounty.gov/dpw/Transportation/Traffic.aspx

Project Address/APN	6385 Halloran Summit Rd, Nipton, CA 92364; APN :0570-061-26-0-0000		
Project Description	Terrible Herbst Truck Stop		
City	Nipton		
Project Horizon Year	2040	**Project Opening Year**	2025
Closest Intersection (Xtn) to the Project			
Xtn N/S Street Name	Halloran Summit Road		
Xtn E/W Street Name	I-15 NB Ramps & I-15 SB Ramps		
County Supervisorial District	1	**Ambient Growth Rate per Year Valley 2%, Desert 1%**	2%

	Traffic Engineer	**Owner/Developer**
Company	Greenlight Traffic Engineering	Terrible Herbst
Name	Scott Kelley	Timothy P. Herbst
Address	14050 N 83rd Ave, Ste 290,	5195 Las Vegas Blvd
City, State, Zip Code	Peoria, AZ 85381	Las Vegas, NV 89119
Phone #	(602) 499-1339	(702) 798-6400
Email address	scottk@greenlightte.com	

Greenlight Traffic Engineering, LLC	11/13/23
Firm Preparing Study	**DATE**
Scott Kelley, PE, PTOE	73357
Engineer of Record	**License Number**

SCOPE FOR TRAFFIC STUDY

Project Name:	PROJ-2023-00036 Terrible Herbst Truck Stop

1. Traffic Distribution: Please insert or attach Figure(s) illustrating project trip distribution in percentages and volumes at the study intersections analyzed.

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

Transportation Demand Management (TDM)	Yes/no	
Existing Active Land Use	Yes/no	
Previous Land Use	Yes/no	
Internal Trip Reduction	Yes/no	
Pass-by Trip Reduction	Yes/no	

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.

Project Name:	PROJ-2023-00036 Terrible Herbst Truck Stop

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

N/A

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' Vehicle Miles Traveled-Focused Transportation Impact Study Guide (May 2020) and can be obtained from https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.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 San Bernardino County Transportation Authority CMP outlines allowable modifications to these procedures. The San Bernardino County Transportation Authority CMP can be viewed online at: https://www.gosbcta.com/planning-sustainability/?term=249

SCOPE FOR TRAFFIC STUDY

Project Name:	PROJ-2023-00036 Terrible Herbst Truck Stop

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:	11th	

Land Use Code	Land Use	Rate Based on	QTY	AVTE Units*	Daily Trips	Weekday A.M. Peak			Weekday P.M. Peak			Weekend peak hour[1]		
						In	Out	Total	In	Out	Total	In	Out	Total
945	Convenience Store/Gas Station (5.5-10k)	I	16	Fueling Position	5,532				215	215	430	215	215	430
950	Truck Stop	I	5	Fueling Position	1,120				36	41	77	36	41	77
N/A	EV Charging Station	O	2	Charging Station	80[2]				4[3]	4[3]	8[3]	4[3]	4[3]	8[3]

* - Average Vehicle Trip Ends.
For ITE Land Uses provide number and name of Land Use. e.g. LU 814 - Variety Store. Units include ksf, employee, GLA, etc.
[1] Weekday PM peak hour trips to be used for Sunday AM peak hour trips
[2] Daily Trips = PM Peak Hour Trips/0.1
[3] Estimated trips are calculated under the assumption that each vehicle requires approximately 30 minutes for charging.

SCOPE FOR TRAFFIC STUDY

Project Name:	PROJ-2023-00036 Terrible Herbst Truck Stop

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	% City	N-S/E-W Street Name	City Name/Caltrans	Signalized	CMP
1	0%	0%	Halloran Summit Rd/I-15 NB Ramps	Caltrans	Yes/no	Yes/no
2	0%	0%	Halloran Summit Rd/I-15 SB Ramps	Caltrans	Yes/no	Yes/no
3	100%	0%	Halloran Summit Rd/Driveway 1	SB County	Yes/no	Yes/no
4	100%	0%	Halloran Summit Rd/Driveway 2	SB County	Yes/no	Yes/no
5	100%	0%	Halloran Summit Rd/Driveway 3	SB County	Yes/no	Yes/no
6					Yes/no	Yes/no
7					Yes/no	Yes/no
8					Yes/no	Yes/no
9					Yes/no	Yes/no
10					Yes/no	Yes/no

Cities/agencies to be consulted: Caltrans

SCOPE FOR TRAFFIC STUDY

Project Name:	PROJ-2023-00036 Terrible Herbst Truck Stop

7. Other:

Traffic counts may be conducted immediately per the following:
• Must be taken on Tuesdays, Wednesdays or Thursdays. • Certain projects may need to collect traffic counts on Friday or Sunday
• 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.
• Raw traffic counts data must be included with traffic analysis study
• Traffic Counts must not be older than 1 year prior to submittal unless approved by County Traffic.

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 $1,802 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:	PROJ-2023-00036 Terrible Herbst Truck Stop

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:

San Bernardino County
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: Eric.Valencia@dpw.sbcounty.gov or Osvaldo.Roque@dpw.sbcounty.gov

Raunak Betala

From: Camarillo, James@DOT <james.camarillo@dot.ca.gov>
Sent: Monday, October 2, 2023 12:22 PM
To: Raunak Betala
Cc: Clark, Rosa F@DOT; Barragan, Elena
Subject: RE: Terrible Herbst TIA | Scoping
Attachments: S4 A101 Site Plan-A101.pdf; LDR_SafetyReviewGuidence_Dece2020.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon, Raunak,

The California Department of Transportation (Caltrans) has completed the review of the proposed site plan and proposed Traffic Impact Scope for Terrible Herbst Commercial Development for a Convenience Store, Auto Fueling, and Truck Parking within the unincorporated community of Nipton in the Ivanpah Valley, County of San Bernardino County, (APN 0570-061-26-0).

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when a proposed development may impact our facilities. As the Responsible Agency defined by the California Environmental Quality Act, (CEQA) it is also our responsibility to make recommendations to offset expected impacts to the SHS resulting with proposed development. As the Lead Agency under CEQA, the County of San Bernardino land use approval is also subject to the policies and regulations that govern the SHS where development impacts are mitigated within the SHS right-of-way (R/W). Given the immediate proximity of the proposed development and the SHS right-of-way (R/W,) impacts requiring mitigation and issuance of a Caltrans Encroachment Permit for construction thereof, is considered likely. Our remarks are provided in anticipation of future Caltrans Encroachment Permit plan review and permit issuance:

Traffic Analysis:
After considering the plan we were provided, we recommend preparation of a traffic study addressing existing highway volumes and speed, increased peak hour trips and related turning movements at I-15 and Summit Halloran Interchange. Our concerns with regard to State highway impacts primarily involve site access and roadway modifications.

1. This Study should also include the traffic safety review analysis and vehicle miles traveled (VMT) analysis for Caltrans review.

2. The Traffic Impact Analysis shall be prepared in accordance with the local jurisdiction's Traffic Impact Study guidelines and the Highway Capacity Manual (HCM).

3. Provide a detailed highway layout plan that shows the proposed driveways, sidewalks, curbs and gutters, existing and proposed lane configurations, existing and proposed signage, and striping, existing and proposed right of way, and all roadway dimensions.

4. Comply with HDM distances between nearest road/driveway, implement shared access driveways where feasible.

5. Include a Truck Turning Template to demonstrate site accessibility at driveway locations proposed that will accommodate vehicles and trailers expected to use the proposed commercial development.

Safety Reviews:
Please provide traffic safety reviews as a stand-alone report for proposed land use projects and plans affecting the State Highway System. **See attachment.**

1. ***Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance in December 2020.*** Please follow the steps below:
   a) To request crash data on the State Highway System, please submit your request via our California Public Records Act (CPRA) portal following the link (Support Home Page (mycusthelp.com))
   b) Please analyze the existing crash data and discuss project's possible impact on safety.
   c) Please provide appropriate counter measures to mitigate/reduce project's safety impact if applicable.

2. Use HSM safety analysis to assess the impact of the project and add a discussion in the report.
   - Existing condition
   - Opening year: with and without project
   - Horizon year: with and without project

Right-of-Way Issues and considerations:
In the event Right-of-Way Dedication is determined, dedication as required to comply with General Plan, Circulation Element Classification, and corresponding Roadway Cross-Section Standards is allowed within Caltrans R/W. However, differences in standards may require adjustments in roadway design sufficient to secure Caltrans permit issuance.

Grading, Drainage and Water Quality Management Plans:
Site drainage plans detailing runoff quantities and detention basin calculations where necessary may be required. Water quality management information demonstrating site runoff compliance to NPDES requirements may be required as well. Minimize flows entering R/W; detain flows on-site to the extent feasible. When available, submit plans and supporting documents and studies for review and approval.

For general information regarding Encroachment Permit processing requirements, contact:

Caltrans Office of Encroachment Permits
464 West 4th Street, 6th Floor

San Bernardino, CA 92401-1400
(909) 383-4526
http://www.dot.ca.gov/programs/traffic-operations/ep

Issuance of a Caltrans Encroachment Permit will be required prior to any construction within State R/W. In addition, all work undertaken within SR-38 R/W shall be in compliance to all current design standards, applicable policies, and construction practices.

Please Note: Changes to the Encroachment Permit Review process were made in June 2020 that are intended to enhance overall permit plan review and issuance. These changes implement two options for review intended to accommodate the needs of the encroachment activity. The Encroachment Permit Office Process (EPOP) is available to 95% design-ready encroachment submittals considered non-complex in nature. Where more complex design issues require finalization, the Project Delivery Quality Management Assessment Process (QMAP) is available for review purposes.

Implementation of the appropriate EPOP or QMAP process will be determined with submittal of a permit application. The information attached is provided as a guide to these new review options. Additional process information is available at the websites linked in the attached document.

Thank you for providing us this opportunity to review the Terrible Herbst proposal commercial development and for your consideration of these and future comments. However, if this proposal is later revised in any way, please forward revised plans, and documents to this Office for further evaluation.

Kind regards,

James L. Camarillo
Associate Transportation Planner
Caltrans District 8 – Planning Division
Office of Local Development Review
San Bernardino Coordinator
464 W. 4th Street MS-726
San Bernardino, CA 92401

909-383-4555 office
909-963-8604 work mobile

Email: james.camarillo@dot.ca.gov

From: Raunak Betala <raunakb@greenlightte.com>
Sent: Thursday, September 7, 2023 8:00 AM
To: Camarillo, James@DOT <james.camarillo@dot.ca.gov>
Subject: RE: Terrible Herbst TIA | Scoping

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello James,

Please find the attached site plan.

Thank you!

Raunak Betala | Engineer Intern II
e: raunakb@greenlightte.com w: greenlightte.com
m: 925.922.4629 s: 14050 N 83rd Ave Ste 290 Peoria 85381

Greenlight
Traffic Engineering

From: Camarillo, James@DOT <james.camarillo@dot.ca.gov>
Sent: Thursday, September 7, 2023 7:54 AM
To: Raunak Betala <raunakb@greenlightte.com>
Subject: RE: Terrible Herbst TIA | Scoping

Raunak,

Your information has been received. We will review the scope for the project, any site plans?

If you have any questions, please let me know. Have a great day.

Kind regards,

James L. Camarillo
Associate Transportation Planner
Caltrans District 8 – Planning Division
Office of Local Development Review

San Bernardino Coordinator
464 W. 4th Street MS-726
San Bernardino, CA 92401

909-383-4555 office
909-963-8604 work mobile

Email: james.camarillo@dot.ca.gov

From: Raunak Betala <raunakb@greenlightte.com>
Sent: Wednesday, September 6, 2023 10:27 AM
To: Camarillo, James@DOT <james.camarillo@dot.ca.gov>
Cc: Collette Frohlich <collettef@greenlightte.com>
Subject: Terrible Herbst TIA | Scoping

Hello James,

The following is the scope of work for the proposed Gas Station/Truck Stop (site plan attached), located on the southeast corner of the Barstow Freeway on-ramp at the Halloran Summit Rd intersection in Nipton, Arizona. The following scoping below was worked out with the San Bernardino County engineer. Please provide any comments and changes on the below summary.

Scope of Work

- **Study Horizons:**
  - Existing Sunday Midday and Friday PM (2)
  - Background Conditions Non-Site and Total Sunday Midday and Friday PM (4)
  - Cumulative Conditions Non-Site and Total Sunday Midday and Friday PM (4)
- **Study Intersections:**
  - Halloran Summit Road/Barstow Freeway On-Ramp
  - Halloran Summit Road/Barstow Freeway Off-Ramp
  - Site Driveways
- **Traffic Data Collection:**
  - Turning Movement Counts (TMCs) at the following intersections (Data collection period: Sunday 12-3 PM, Friday 4-6 PM):
    - Halloran Summit Road/Barstow Freeway On-Ramp
    - Halloran Summit Road/Barstow Freeway Off-Ramp
- **Trip Gen**

- Trip Rates: ITE 11th Edition, Peak Hour Adjacent Street Traffic (The Friday PM Peak hour trips generated were requested to be used for Sunday Midday Peak hour trips per discussion with the County Engineer.)

Land Use	Size	Unit	Sunday Midday Peak Hour			Friday PM Peak Hour			Daily Volume
			In	Out	Total	In	Out	Total	
Convenience Store/Gas Station - GFA (5.5-10k)	16.00	Fueling Positions	215	215	430	215	215	430	5,532
Truck Stop	5.00	Fueling Positions	41	36	77	41	36	77	1,120
Total New Trips Ends			**256**	**251**	**507**	**256**	**251**	**507**	**6,652**

- **Growth Rate:** 2%/year
- **Crash Data:**
  - 3-year crash data summary
- **VMT Analysis:**
  - San Bernadino County Transportation Impact Guidelines
- **Approved but Unbuilt TIAs to include for Background Traffic**
  - Any?
- **Trip Distribution:**


Halloran Summit Road
Barstow Freeway
50%
50%
Legend:
Trip Distribution XX%
Project Location
Study Intersections

Thank you!

Raunak Betala | Engineer Intern II
e: raunakb@greenlightte.com w: greenlightte.com
m: 925.922.4629 s: 14050 N 83rd Ave Ste 290 Peoria 85381

Greenlight Traffic Engineering

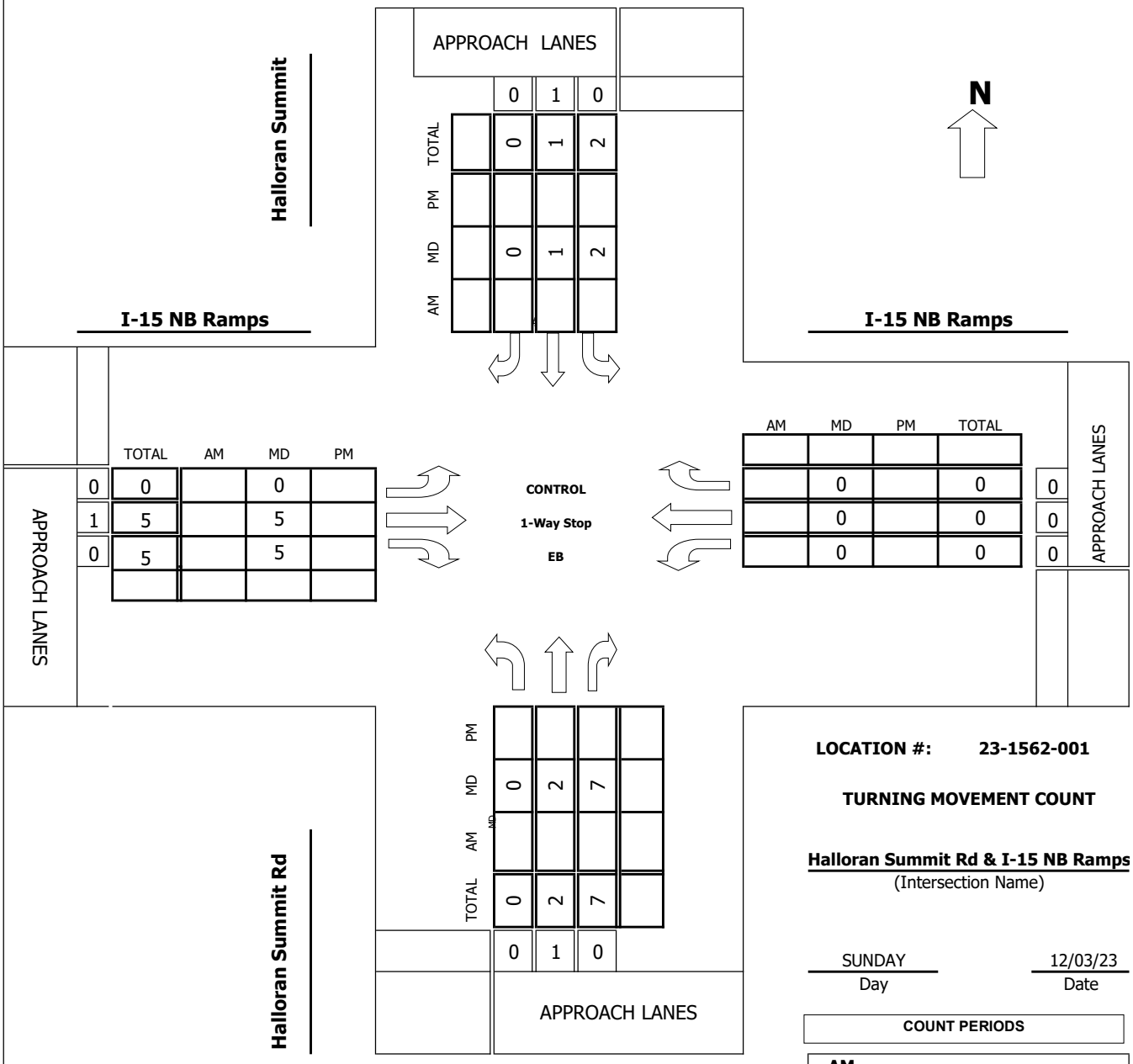
Appendix B: Traffic Count Data Sheets

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 23-1562-001

TMC SUMMARY OF



LOCATION #: 23-1562-001

TURNING MOVEMENT COUNT

Halloran Summit Rd & I-15 NB Ramps
(Intersection Name)

SUNDAY — Day
12/03/23 — Date

COUNT PERIODS		
AM		
NOON	12:00 PM -	3:00 PM
PM		

AM PEAK HOUR _____

NOON PEAK HOUR 145 PM

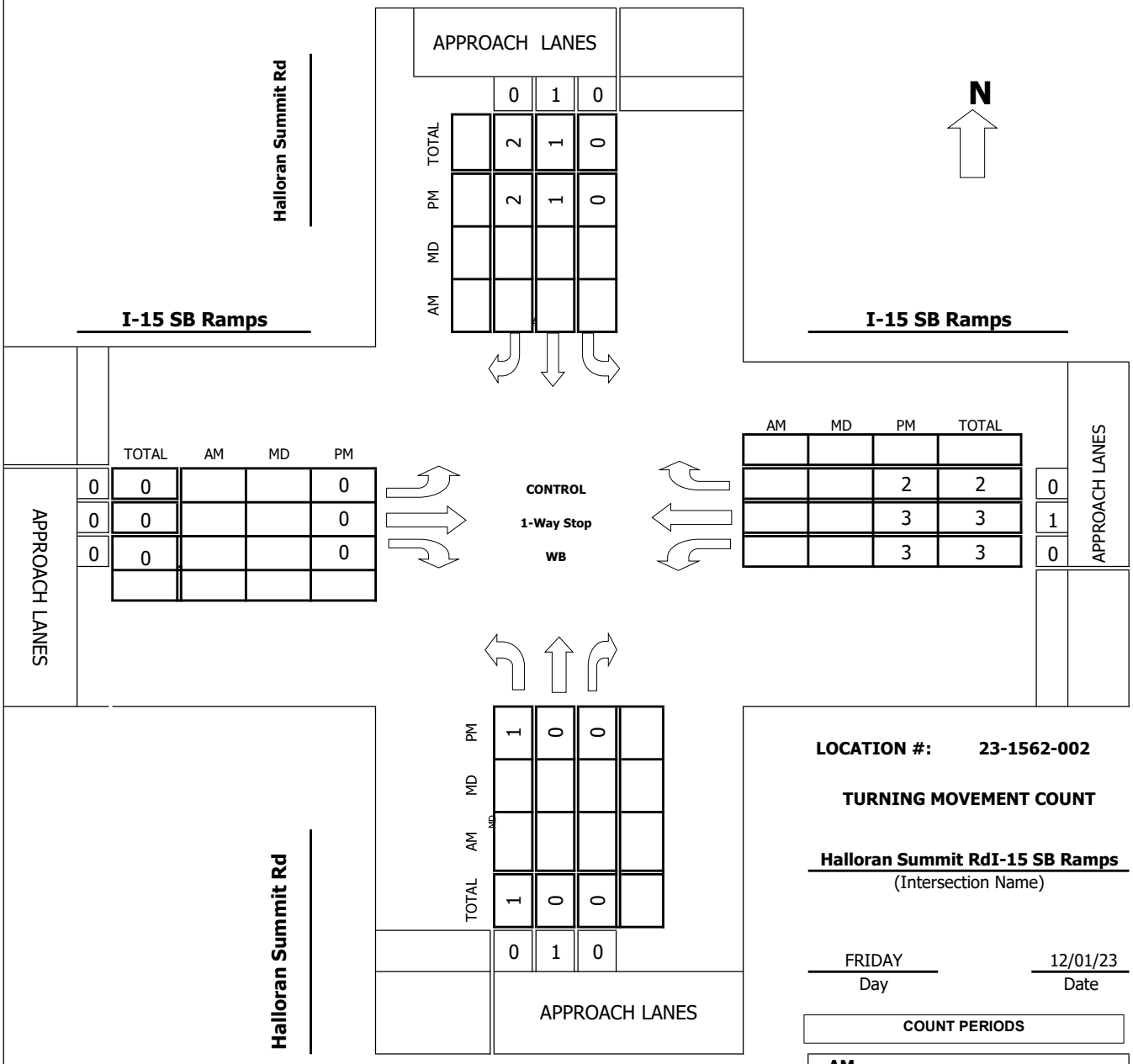
PM PEAK HOUR _____

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 23-1562-002

TMC SUMMARY OF Halloran Summit RdI-15 SB Ramps



LOCATION #: 23-1562-002

TURNING MOVEMENT COUNT

Halloran Summit RdI-15 SB Ramps
(Intersection Name)

FRIDAY (Day) 12/01/23 (Date)

COUNT PERIODS

AM		
NOON		
PM	4:00 PM	- 6:00 PM

AM PEAK HOUR _____

NOON PEAK HOUR _____

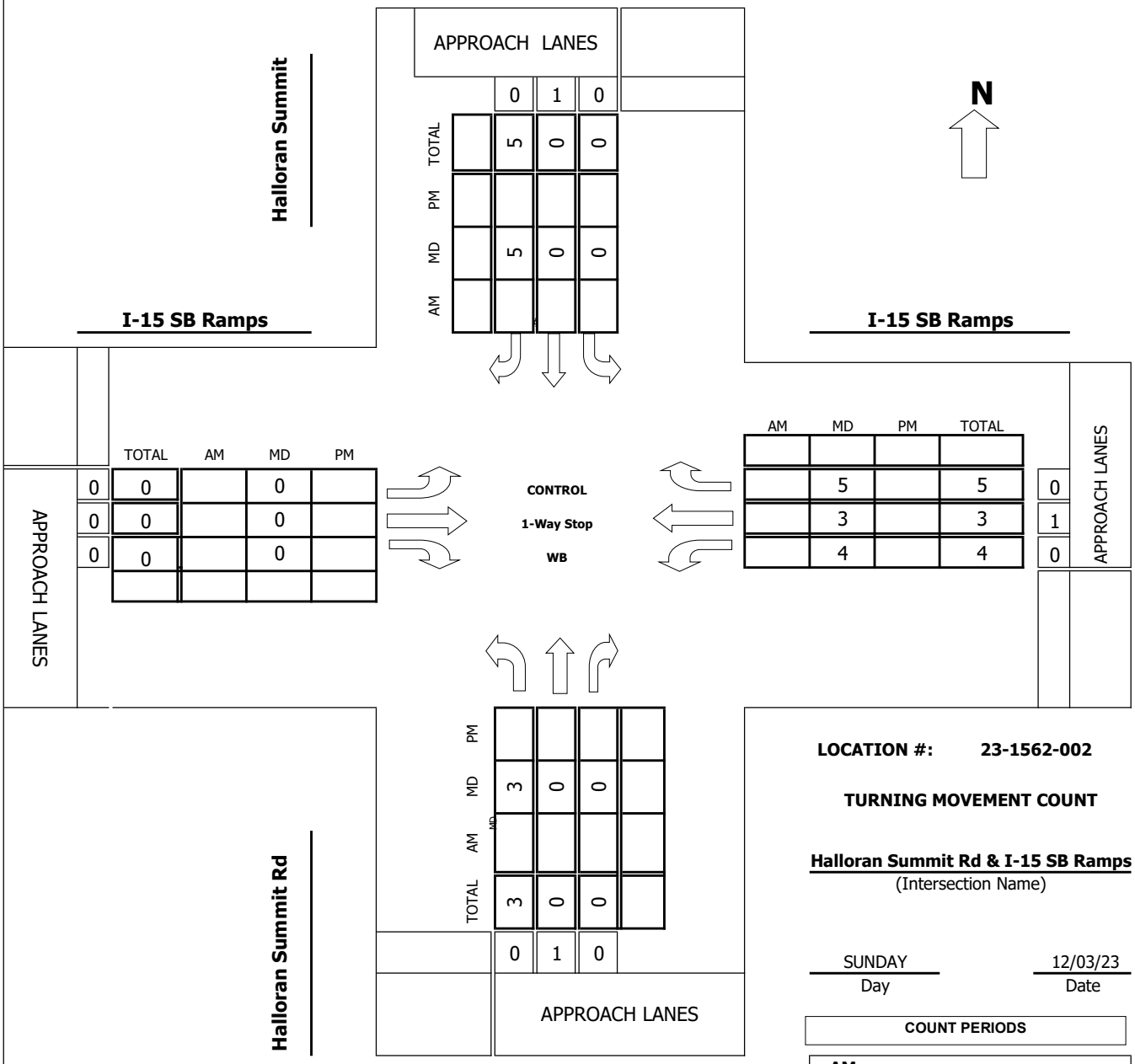
PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 23-1562-002

TMC SUMMARY OF



LOCATION #: 23-1562-002

TURNING MOVEMENT COUNT

Halloran Summit Rd & I-15 SB Ramps
(Intersection Name)

SUNDAY — Day
12/03/23 — Date

COUNT PERIODS		
AM		
NOON	12:00 PM -	3:00 PM
PM		

AM PEAK HOUR _____

NOON PEAK HOUR 100 PM

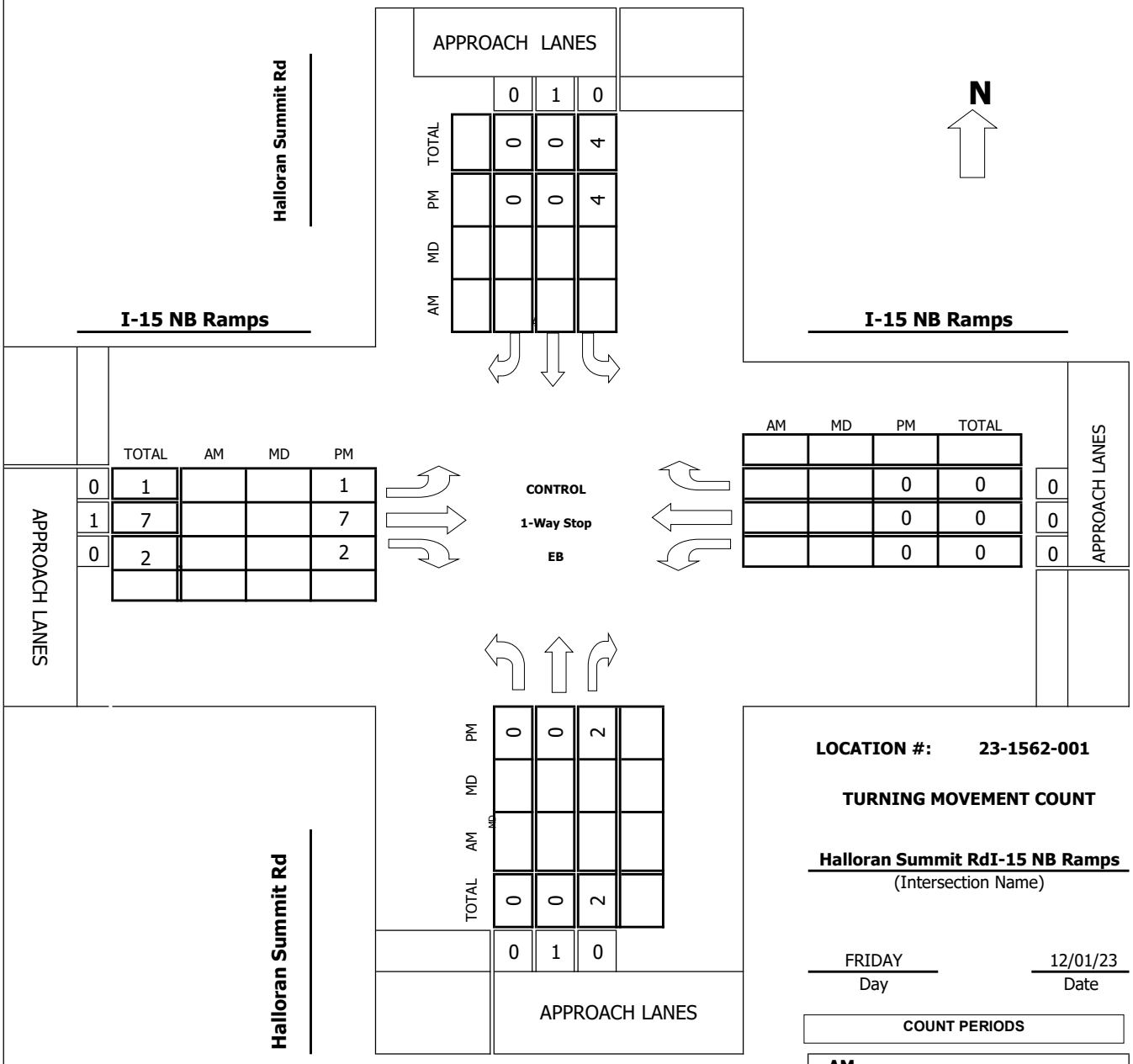
PM PEAK HOUR _____

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 23-1562-001

TMC SUMMARY OF Halloran Summit RdI-15 NB Ramps



LOCATION #: 23-1562-001

TURNING MOVEMENT COUNT

Halloran Summit RdI-15 NB Ramps
(Intersection Name)

FRIDAY (Day) 12/01/23 (Date)

COUNT PERIODS		
AM		
NOON		
PM	4:00 PM	- 6:00 PM

AM PEAK HOUR _____

NOON PEAK HOUR _____

PM PEAK HOUR 400 PM

Appendix C: Vistro 2023 Summary Sheets

Existing Conditions
Existing AM and PM Peak Hours
Existing + Site AM and PM Peak Hours

Non-site Conditions
Year 2025 Non-site AM and PM Peak Hours
Year 2040 Non-site AM and PM Peak Hours

Total Conditions
Year 2025 Total AM and PM Peak Hours
Year 2040 Total AM and PM Peak Hours

231094 Nipton CA Terrible Herbst TIA

Vistro File: Z:\...\231094 HORR Nipton CA Terrible Herbst VMT+TIA.vistro

Scenario 1 2023 Fri PM Peak Hour

Report File: Z:\...\1. 2023 Fri Existing PM Peak Hour.pdf

12/12/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.005	9.1	A
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.010	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	1	0	0	0	1	1	1
Total Analysis Volume [veh/h]	1	0	0	0	1	3	0	0	0	4	4	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.59	9.09	8.36
Movement LOS	A	A			A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.85	0.85
d_A, Approach Delay [s/veh]	7.23			0.00			0.00			8.71		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.44											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8000	0.8000	0.8000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	1	0	0	0	2	1	0	0	0
Total Analysis Volume [veh/h]	0	0	3	5	0	0	1	9	3	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.23	0.00	0.00	8.64	9.15	8.37	0.00	0.00	0.00
Movement LOS		A	A	A	A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.04	0.04	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.23	0.23	0.00	1.06	1.06	1.06	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			7.23			8.93			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.25											
Intersection LOS	A											

231094 Nipton CA Terrible Herbst TIA

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Scenario 2 2023 Sun AM Peak Hour

Report File: Z:\...\2. 2023 Sun Existing AM Peak Hour.pdf

12/12/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.005	9.2	A
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.007	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	0	0	0	2	0	0	0	1	1	2
Total Analysis Volume [veh/h]	4	0	0	0	0	6	0	0	0	5	4	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.64	9.15	8.37
Movement LOS	A	A			A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15	1.15	1.15
d_A, Approach Delay [s/veh]	7.23			0.00			0.00			8.67		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.36											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8330	0.8330	0.8330	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	1	0	0	0	2	2	0	0	0
Total Analysis Volume [veh/h]	0	3	9	3	1	0	0	6	6	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.24	0.00	0.00	8.65	9.17	8.37	0.00	0.00	0.00
Movement LOS		A	A	A	A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.04	0.04	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.13	0.13	0.00	0.94	0.94	0.94	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			5.43			8.77			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.53											
Intersection LOS	A											

231094 Nipton CA Terrible Herbst TIA

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Scenario 11 2023 Fri Total Site PM Peak Hour

Report File: Z:\...\3. 2023 Fri Existing+Site PM Peak Hour.pdf

1/19/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.008	14.8	B
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.019	13.9	B
3	Halloran Summit Road/Driveway 1	Two-way stop	HCM 7th Edition	WB Right	0.114	9.8	A
4	Halloran Summit Road/Driveway 2	Two-way stop	HCM 7th Edition	WB Right	0.099	9.2	A
5	Halloran Summit Road/Driveway 3	Two-way stop	HCM 7th Edition	WB Right	0.088	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	132	0	0	0	0	0	0	0	0	134	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	133	0	0	0	1	2	0	0	0	137	3	2
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	0	0	0	0	1	0	0	0	43	1	1
Total Analysis Volume [veh/h]	166	0	0	0	1	3	0	0	0	171	4	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.01	0.00
d_M, Delay for Movement [s/veh]	7.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.45	14.84	11.29
Movement LOS	A	A			A	A				B	B	B
95th-Percentile Queue Length [veh/ln]	0.34	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	1.36	1.36
95th-Percentile Queue Length [ft/ln]	8.56	8.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.03	34.03	34.03
d_A, Approach Delay [s/veh]	7.48			0.00			0.00			14.41		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	10.94											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	132	131	0	134	0	0	0	134	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	132	133	4	134	0	1	7	136	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8000	0.8000	0.8000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	41	42	1	42	0	0	2	43	0	0	0
Total Analysis Volume [veh/h]	0	165	166	5	168	0	1	9	170	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.94	0.00	0.00	12.89	13.92	10.29	0.00	0.00	0.00
Movement LOS		A	A	A	A		B	B	B			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.81	0.81	0.81	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.21	0.21	0.00	20.37	20.37	20.37	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.23			10.48			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	2.82											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Halloran Summit Road/Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	174	0	91	177	0	89
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	174	0	91	177	0	89
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	0	25	48	0	24
Total Analysis Volume [veh/h]	189	0	99	192	0	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.07	0.00	0.00	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	7.72	0.00	13.74	9.76
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.38	0.38
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.36	4.36	9.59	9.59
d_A, Approach Delay [s/veh]	0.00		2.62		9.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.96					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Halloran Summit Road/Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	87	0	88	88	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	0	88	88	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	24	24	0	24
Total Analysis Volume [veh/h]	95	0	96	96	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	7.51	0.00	11.64	9.15
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.33	0.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.22	4.22	8.20	8.20
d_A, Approach Delay [s/veh]	0.00		3.76		9.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Halloran Summit Road/Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	88	0	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	88	0	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	24	0	0	24
Total Analysis Volume [veh/h]	0	0	96	0	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	7.36	0.00	10.12	8.64
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.19	0.19	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.71	4.71	7.18	7.18
d_A, Approach Delay [s/veh]	0.00		7.36		8.64	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.99					
Intersection LOS	A					

231094 Nipton CA Terrible Herbst TIA

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Scenario 12 2023 Sun Total Site AM Peak Hour

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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.008	15.1	C
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.013	13.9	B
3	Halloran Summit Road/Driveway 1	Two-way stop	HCM 7th Edition	WB Right	0.114	9.8	A
4	Halloran Summit Road/Driveway 2	Two-way stop	HCM 7th Edition	WB Right	0.099	9.2	A
5	Halloran Summit Road/Driveway 3	Two-way stop	HCM 7th Edition	WB Right	0.088	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	132	0	0	0	0	0	0	0	0	134	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	0	0	0	0	5	0	0	0	138	3	5
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	0	0	0	0	2	0	0	0	43	1	2
Total Analysis Volume [veh/h]	169	0	0	0	0	6	0	0	0	173	4	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.01	0.01
d_M, Delay for Movement [s/veh]	7.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.69	15.08	11.45
Movement LOS	A	A			A	A				B	C	B
95th-Percentile Queue Length [veh/ln]	0.35	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	1.42	1.42
95th-Percentile Queue Length [ft/ln]	8.75	8.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.60	35.60	35.60
d_A, Approach Delay [s/veh]	7.49			0.00			0.00			14.59		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	10.99											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0000	1.0000	1.0000	1.0000	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	132	131	0	134	0	0	0	134	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	134	138	2	135	0	0	5	139	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8330	0.8330	0.8330	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	42	43	1	42	0	0	2	42	0	0	0
Total Analysis Volume [veh/h]	0	168	173	3	169	0	0	6	167	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.19	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.96	0.00	0.00	12.82	13.88	10.20	0.00	0.00	0.00
Movement LOS		A	A	A	A		B	B	B			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.76	0.76	0.76	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.13	0.13	0.00	19.03	19.03	19.03	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.14			10.33			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	2.64											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Halloran Summit Road/Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	174	0	91	177	0	89
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	174	0	91	177	0	89
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	0	25	48	0	24
Total Analysis Volume [veh/h]	189	0	99	192	0	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.07	0.00	0.00	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	7.72	0.00	13.74	9.76
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.38	0.38
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.36	4.36	9.59	9.59
d_A, Approach Delay [s/veh]	0.00		2.62		9.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.96					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Halloran Summit Road/Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	87	0	88	88	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	0	88	88	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	24	24	0	24
Total Analysis Volume [veh/h]	95	0	96	96	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	7.51	0.00	11.64	9.15
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.33	0.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.22	4.22	8.20	8.20
d_A, Approach Delay [s/veh]	0.00		3.76		9.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Halloran Summit Road/Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	88	0	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	88	0	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	24	0	0	24
Total Analysis Volume [veh/h]	0	0	96	0	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	7.36	0.00	10.12	8.64
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.19	0.19	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.71	4.71	7.18	7.18
d_A, Approach Delay [s/veh]	0.00		7.36		8.64	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.99					
Intersection LOS	A					

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Scenario 3 2025 Fri Non-Site PM Peak Hour

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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.005	9.1	A
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.010	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	1	0	0	0	1	1	1
Total Analysis Volume [veh/h]	1	0	0	0	1	3	0	0	0	4	4	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.59	9.09	8.36
Movement LOS	A	A			A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.85	0.85
d_A, Approach Delay [s/veh]	7.23			0.00			0.00			8.71		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.44											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8000	0.8000	0.8000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	1	0	0	0	2	1	0	0	0
Total Analysis Volume [veh/h]	0	0	3	5	0	0	1	9	3	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.23	0.00	0.00	8.64	9.15	8.37	0.00	0.00	0.00
Movement LOS		A	A	A	A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.04	0.04	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.23	0.23	0.00	1.06	1.06	1.06	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			7.23			8.93			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.25											
Intersection LOS	A											

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Scenario 4 2025 Sun Non-Site AM Peak Hour

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12/12/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.005	9.2	A
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.007	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	0	0	0	2	0	0	0	1	1	2
Total Analysis Volume [veh/h]	4	0	0	0	0	6	0	0	0	5	4	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.64	9.15	8.37
Movement LOS	A	A			A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15	1.15	1.15
d_A, Approach Delay [s/veh]	7.23			0.00			0.00			8.67		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.36											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8330	0.8330	0.8330	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	1	0	0	0	2	2	0	0	0
Total Analysis Volume [veh/h]	0	3	9	3	1	0	0	6	6	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.24	0.00	0.00	8.65	9.17	8.37	0.00	0.00	0.00
Movement LOS		A	A	A	A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.04	0.04	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.13	0.13	0.00	0.94	0.94	0.94	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			5.43			8.77			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.53											
Intersection LOS	A											

231094 Nipton CA Terrible Herbst TIA

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1/19/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.008	14.8	B
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.019	13.9	B
3	Halloran Summit Road/Driveway 1	Two-way stop	HCM 7th Edition	WB Right	0.114	9.8	A
4	Halloran Summit Road/Driveway 2	Two-way stop	HCM 7th Edition	WB Right	0.099	9.2	A
5	Halloran Summit Road/Driveway 3	Two-way stop	HCM 7th Edition	WB Right	0.088	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	132	0	0	0	0	0	0	0	0	134	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	133	0	0	0	1	2	0	0	0	137	3	2
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	0	0	0	0	1	0	0	0	43	1	1
Total Analysis Volume [veh/h]	166	0	0	0	1	3	0	0	0	171	4	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.01	0.00
d_M, Delay for Movement [s/veh]	7.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.45	14.84	11.29
Movement LOS	A	A			A	A				B	B	B
95th-Percentile Queue Length [veh/ln]	0.34	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	1.36	1.36
95th-Percentile Queue Length [ft/ln]	8.56	8.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.03	34.03	34.03
d_A, Approach Delay [s/veh]	7.48			0.00			0.00			14.41		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	10.94											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	132	131	0	134	0	0	0	134	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	132	133	4	134	0	1	7	136	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8000	0.8000	0.8000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	41	42	1	42	0	0	2	43	0	0	0
Total Analysis Volume [veh/h]	0	165	166	5	168	0	1	9	170	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.94	0.00	0.00	12.89	13.92	10.29	0.00	0.00	0.00
Movement LOS		A	A	A	A		B	B	B			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.81	0.81	0.81	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.21	0.21	0.00	20.37	20.37	20.37	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.23			10.48			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	2.82											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Halloran Summit Road/Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	174	0	91	177	0	89
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	174	0	91	177	0	89
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	0	25	48	0	24
Total Analysis Volume [veh/h]	189	0	99	192	0	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.07	0.00	0.00	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	7.72	0.00	13.74	9.76
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.38	0.38
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.36	4.36	9.59	9.59
d_A, Approach Delay [s/veh]	0.00		2.62		9.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.96					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Halloran Summit Road/Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	87	0	88	88	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	0	88	88	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	24	24	0	24
Total Analysis Volume [veh/h]	95	0	96	96	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	7.51	0.00	11.64	9.15
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.33	0.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.22	4.22	8.20	8.20
d_A, Approach Delay [s/veh]	0.00		3.76		9.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Halloran Summit Road/Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	88	0	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	88	0	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	24	0	0	24
Total Analysis Volume [veh/h]	0	0	96	0	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	7.36	0.00	10.12	8.64
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.19	0.19	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.71	4.71	7.18	7.18
d_A, Approach Delay [s/veh]	0.00		7.36		8.64	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.99					
Intersection LOS	A					

231094 Nipton CA Terrible Herbst TIA

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Scenario 6 2025 Sun Total Site AM Peak Hour

Report File: Z:\...\8. 2025 Sun Total Site AM Peak Hour.pdf

1/19/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.008	15.1	C
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.013	13.9	B
3	Halloran Summit Road/Driveway 1	Two-way stop	HCM 7th Edition	WB Right	0.114	9.8	A
4	Halloran Summit Road/Driveway 2	Two-way stop	HCM 7th Edition	WB Right	0.099	9.2	A
5	Halloran Summit Road/Driveway 3	Two-way stop	HCM 7th Edition	WB Right	0.088	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	132	0	0	0	0	0	0	0	0	134	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	0	0	0	0	5	0	0	0	138	3	5
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	0	0	0	0	2	0	0	0	43	1	2
Total Analysis Volume [veh/h]	169	0	0	0	0	6	0	0	0	173	4	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.01	0.01
d_M, Delay for Movement [s/veh]	7.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.69	15.08	11.45
Movement LOS	A	A			A	A				B	C	B
95th-Percentile Queue Length [veh/ln]	0.35	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	1.42	1.42
95th-Percentile Queue Length [ft/ln]	8.75	8.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.60	35.60	35.60
d_A, Approach Delay [s/veh]	7.49			0.00			0.00			14.59		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	10.99											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	132	131	0	134	0	0	0	134	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	134	138	2	135	0	0	5	139	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8330	0.8330	0.8330	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	42	43	1	42	0	0	2	42	0	0	0
Total Analysis Volume [veh/h]	0	168	173	3	169	0	0	6	167	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.19	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.96	0.00	0.00	12.82	13.88	10.20	0.00	0.00	0.00
Movement LOS		A	A	A	A		B	B	B			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.76	0.76	0.76	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.13	0.13	0.00	19.03	19.03	19.03	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.14			10.33			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	2.64											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Halloran Summit Road/Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	174	0	91	177	0	89
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	174	0	91	177	0	89
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	0	25	48	0	24
Total Analysis Volume [veh/h]	189	0	99	192	0	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.07	0.00	0.00	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	7.72	0.00	13.74	9.76
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.38	0.38
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.36	4.36	9.59	9.59
d_A, Approach Delay [s/veh]	0.00		2.62		9.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.96					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Halloran Summit Road/Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	87	0	88	88	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	0	88	88	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	24	24	0	24
Total Analysis Volume [veh/h]	95	0	96	96	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	7.51	0.00	11.64	9.15
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.33	0.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.22	4.22	8.20	8.20
d_A, Approach Delay [s/veh]	0.00		3.76		9.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Halloran Summit Road/Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	88	0	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	88	0	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	24	0	0	24
Total Analysis Volume [veh/h]	0	0	96	0	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	7.36	0.00	10.12	8.64
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.19	0.19	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.71	4.71	7.18	7.18
d_A, Approach Delay [s/veh]	0.00		7.36		8.64	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.99					
Intersection LOS	A					

231094 Nipton CA Terrible Herbst TIA

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Scenario 7 2040 Fri Non-Site PM Peak Hour

Report File: Z:\...\7. 2040 Fri Non-Site PM Peak Hour.pdf

12/12/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.006	9.1	A
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.015	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.0000	1.0000	1.4000	1.4000	1.0000	1.0000	1.0000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	0	0	1	3	0	0	0	4	4	3
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	1	0	0	0	1	1	1
Total Analysis Volume [veh/h]	1	0	0	0	1	4	0	0	0	5	5	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.60	9.11	8.37
Movement LOS	A	A			A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	1.08	1.08
d_A, Approach Delay [s/veh]	7.23			0.00			0.00			8.72		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.46											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.4000	1.4000	1.4000	1.4000	1.0000	1.4000	1.4000	1.4000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	3	6	0	0	1	10	3	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8000	0.8000	0.8000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	2	0	0	0	3	1	0	0	0
Total Analysis Volume [veh/h]	0	0	4	8	0	0	1	13	4	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.24	0.00	0.00	8.71	9.22	8.40	0.00	0.00	0.00
Movement LOS		A	A	A	A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.06	0.06	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.37	0.37	0.00	1.50	1.50	1.50	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			7.24			9.01			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.33											
Intersection LOS	A											

231094 Nipton CA Terrible Herbst TIA

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Scenario 8 2040 Sun Non-Site AM Peak Hour

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12/12/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.006	9.2	A
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.009	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.0000	1.0000	1.4000	1.4000	1.0000	1.0000	1.0000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	0	0	0	7	0	0	0	6	4	7
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	0	0	0	2	0	0	0	2	1	2
Total Analysis Volume [veh/h]	5	0	0	0	0	9	0	0	0	8	5	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	7.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.69	9.21	8.40
Movement LOS	A	A			A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07
95th-Percentile Queue Length [ft/ln]	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69	1.69	1.69
d_A, Approach Delay [s/veh]	7.24			0.00			0.00			8.69		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.32											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.4000	1.4000	1.4000	1.4000	1.0400	1.4000	1.4000	1.4000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	10	3	1	0	0	7	7	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8330	0.8330	0.8330	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	3	1	0	0	0	2	2	0	0	0
Total Analysis Volume [veh/h]	0	4	13	4	1	0	0	8	8	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.25	0.00	0.00	8.69	9.22	8.39	0.00	0.00	0.00
Movement LOS		A	A	A	A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.05	0.05	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.17	0.17	0.00	1.27	1.27	1.27	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			5.80			8.81			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.47											
Intersection LOS	A											

231094 Nipton CA Terrible Herbst TIA

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Scenario 9 2040 Fri Total Site PM Peak Hour

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1/19/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.010	14.9	B
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.028	14.1	B
3	Halloran Summit Road/Driveway 1	Two-way stop	HCM 7th Edition	WB Right	0.114	9.8	A
4	Halloran Summit Road/Driveway 2	Two-way stop	HCM 7th Edition	WB Right	0.099	9.2	A
5	Halloran Summit Road/Driveway 3	Two-way stop	HCM 7th Edition	WB Right	0.088	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	14.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	1	0	0	0	1	2	0	0	0	3	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.0000	1.0000	1.4000	1.4000	1.0000	1.0000	1.0000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	132	0	0	0	0	0	0	0	0	134	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	133	0	0	0	1	3	0	0	0	138	4	3
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	0	0	0	0	1	0	0	0	43	1	1
Total Analysis Volume [veh/h]	166	0	0	0	1	4	0	0	0	173	5	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.01	0.00
d_M, Delay for Movement [s/veh]	7.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.55	14.93	11.38
Movement LOS	A	A			A	A				B	B	B
95th-Percentile Queue Length [veh/ln]	0.34	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	1.40	1.40
95th-Percentile Queue Length [ft/ln]	8.57	8.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.06	35.06	35.06
d_A, Approach Delay [s/veh]	7.48			0.00			0.00			14.49		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	10.99											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	14.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.028

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	0	2	4	0	0	1	7	2	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.4000	1.4000	1.4000	1.4000	1.0000	1.4000	1.4000	1.4000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	132	131	0	134	0	0	0	134	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	132	134	6	134	0	1	10	137	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8000	0.8000	0.8000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	41	42	2	42	0	0	3	43	0	0	0
Total Analysis Volume [veh/h]	0	165	168	8	168	0	1	13	171	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.20	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.94	0.00	0.00	13.07	14.12	10.38	0.00	0.00	0.00
Movement LOS		A	A	A	A		B	B	B			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.86	0.86	0.86	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.33	0.33	0.00	21.59	21.59	21.59	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.36			10.66			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	2.93											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Halloran Summit Road/Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	174	0	91	177	0	89
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	174	0	91	177	0	89
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	0	25	48	0	24
Total Analysis Volume [veh/h]	189	0	99	192	0	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.07	0.00	0.00	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	7.72	0.00	13.74	9.76
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.38	0.38
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.36	4.36	9.59	9.59
d_A, Approach Delay [s/veh]	0.00		2.62		9.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.96					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Halloran Summit Road/Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	87	0	88	88	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	0	88	88	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	24	24	0	24
Total Analysis Volume [veh/h]	95	0	96	96	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	7.51	0.00	11.64	9.15
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.33	0.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.22	4.22	8.20	8.20
d_A, Approach Delay [s/veh]	0.00		3.76		9.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Halloran Summit Road/Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	88	0	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	88	0	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	24	0	0	24
Total Analysis Volume [veh/h]	0	0	96	0	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	7.36	0.00	10.12	8.64
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.19	0.19	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.71	4.71	7.18	7.18
d_A, Approach Delay [s/veh]	0.00		7.36		8.64	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.99					
Intersection LOS	A					

231094 Nipton CA Terrible Herbst TIA

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Scenario 10 2040 Sun Total Site AM Peak Hour

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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Halloran Summit Road/I-15 SB Ramp	Two-way stop	HCM 7th Edition	WB Thru	0.010	15.3	C
2	Halloran Summit Road/I-15 NB Ramp	Two-way stop	HCM 7th Edition	EB Thru	0.017	14.0	B
3	Halloran Summit Road/Driveway 1	Two-way stop	HCM 7th Edition	WB Right	0.114	9.8	A
4	Halloran Summit Road/Driveway 2	Two-way stop	HCM 7th Edition	WB Right	0.099	9.2	A
5	Halloran Summit Road/Driveway 3	Two-way stop	HCM 7th Edition	WB Right	0.088	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Halloran Summit Road/I-15 SB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road						I-15 SB Ramp		
Base Volume Input [veh/h]	3	0	0	0	0	5	0	0	0	4	3	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.0000	1.0000	1.4000	1.4000	1.0000	1.0000	1.0000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	132	0	0	0	0	0	0	0	0	134	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	136	0	0	0	0	7	0	0	0	140	4	7
Peak Hour Factor	0.8000	0.8000	1.0000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	0.8000	0.8000	0.8000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	0	0	0	0	2	0	0	0	44	1	2
Total Analysis Volume [veh/h]	170	0	0	0	0	9	0	0	0	175	5	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.01	0.01
d_M, Delay for Movement [s/veh]	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.87	15.27	11.59
Movement LOS	A	A			A	A				B	C	B
95th-Percentile Queue Length [veh/ln]	0.35	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49	1.49	1.49
95th-Percentile Queue Length [ft/ln]	8.83	8.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.24	37.24	37.24
d_A, Approach Delay [s/veh]	7.50			0.00			0.00			14.73		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	11.03											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 2: Halloran Summit Road/I-15 NB Ramp

Control Type:	Two-way stop	Delay (sec / veh):	14.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Halloran Summit Road			Halloran Summit Road			I-15 NB Ramp					
Base Volume Input [veh/h]	0	2	7	2	1	0	0	5	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.4000	1.4000	1.4000	1.4000	1.0400	1.4000	1.4000	1.4000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	132	131	0	134	0	0	0	134	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	135	141	3	135	0	0	7	141	0	0	0
Peak Hour Factor	1.0000	0.8000	0.8000	0.8000	0.8000	1.0000	0.8330	0.8330	0.8330	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	42	44	1	42	0	0	2	42	0	0	0
Total Analysis Volume [veh/h]	0	169	176	4	169	0	0	8	169	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	7.97	0.00	0.00	12.93	14.01	10.25	0.00	0.00	0.00
Movement LOS		A	A	A	A		B	B	B			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	0.79	0.79	0.79	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.17	0.17	0.00	19.82	19.82	19.82	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.18			10.42			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	2.70											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Halloran Summit Road/Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	174	0	91	177	0	89
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	174	0	91	177	0	89
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	0	25	48	0	24
Total Analysis Volume [veh/h]	189	0	99	192	0	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.07	0.00	0.00	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	7.72	0.00	13.74	9.76
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.38	0.38
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.36	4.36	9.59	9.59
d_A, Approach Delay [s/veh]	0.00		2.62		9.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.96					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Halloran Summit Road/Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 2	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	87	0	88	88	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	0	88	88	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	24	24	0	24
Total Analysis Volume [veh/h]	95	0	96	96	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	7.51	0.00	11.64	9.15
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.17	0.17	0.33	0.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.22	4.22	8.20	8.20
d_A, Approach Delay [s/veh]	0.00		3.76		9.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Halloran Summit Road/Driveway 3

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Halloran Summit Road		Halloran Summit Road		Driveway 3	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	88	0	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	88	0	0	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	24	0	0	24
Total Analysis Volume [veh/h]	0	0	96	0	0	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	7.36	0.00	10.12	8.64
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.19	0.19	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.71	4.71	7.18	7.18
d_A, Approach Delay [s/veh]	0.00		7.36		8.64	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.99					
Intersection LOS	A					

Appendix D: Project Trip Generation

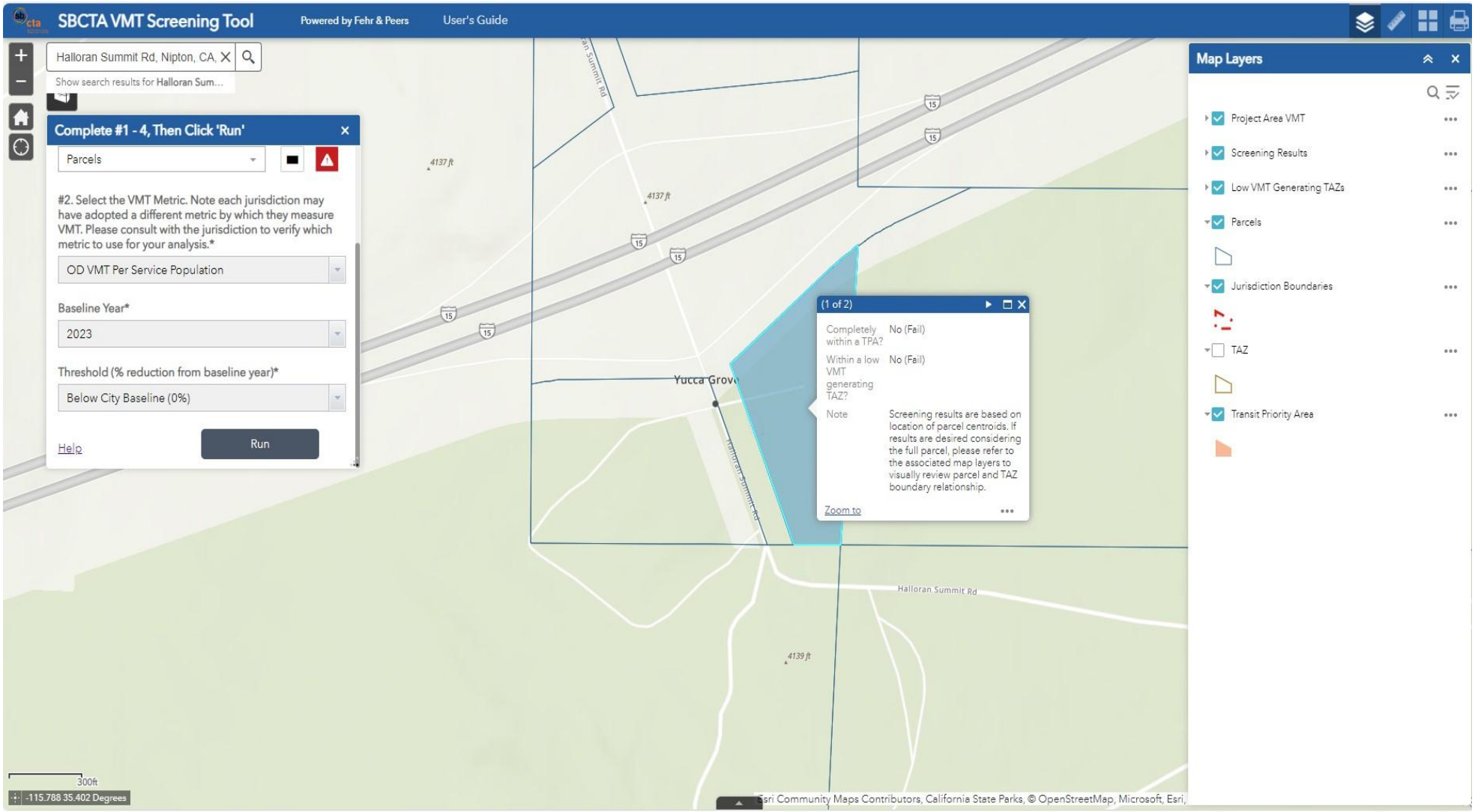
Trip Generation Analysis

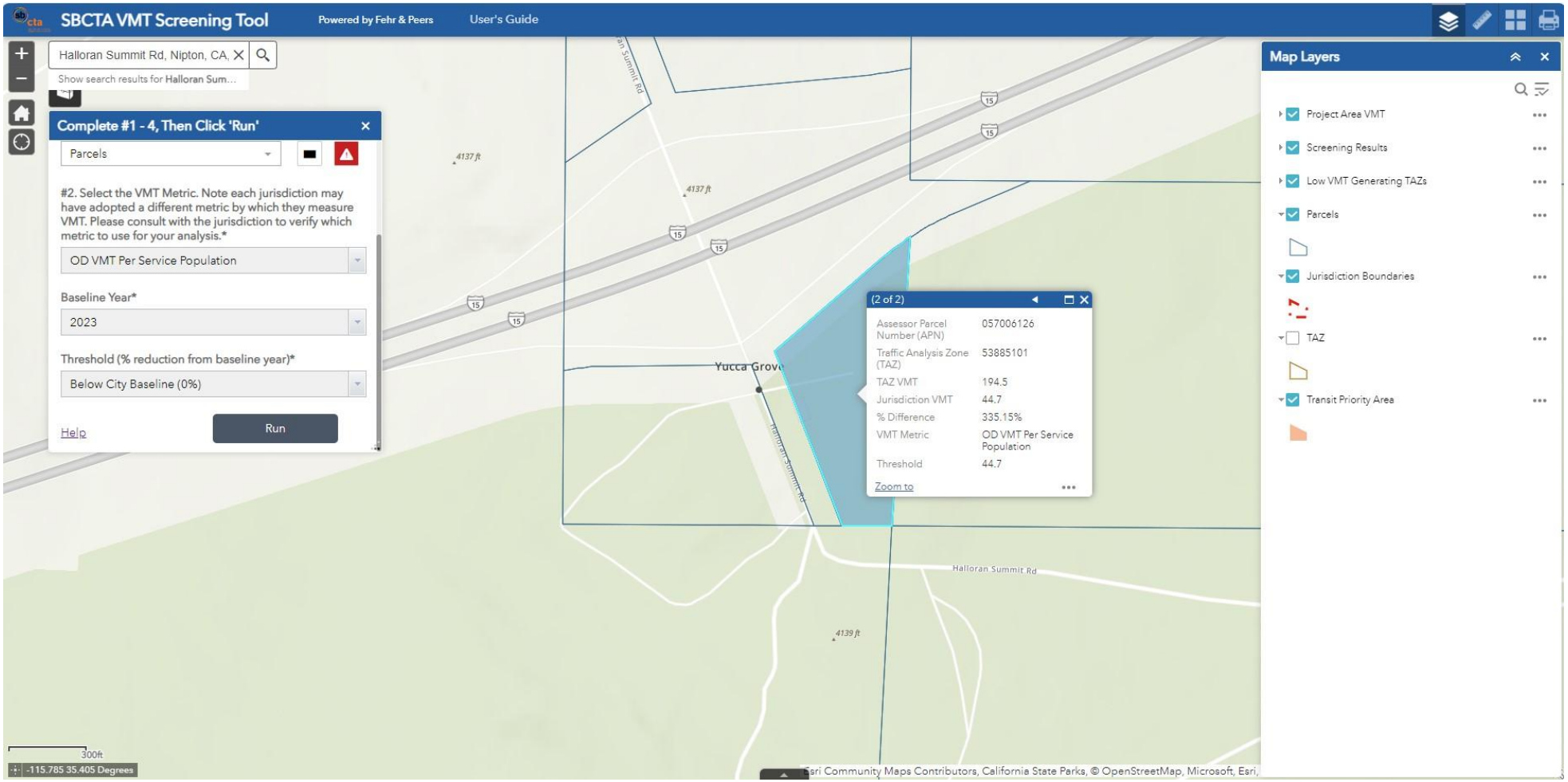
Project: P231121 HORR Nipton CA Terrible Herbst VMT+TIA
Originator: Raunak Betala
Checked: Collette Frohlich, PE
Date: 1/19/2024
Data Source: Site Plan Dated 03.01.2023
Reference Manual: ITE Trip Generation Manual, 11th Edition

Size: Various
Independent Variable: Fueling Positions
Time Period: Weekday (Monday - Friday), Peak Hour Adjacent Street Traffic
Setting/Location General Urban/Suburban

				AM Calc			PM Calc			ADT Calc	AM			PM			
Land Use	**LUC**	**Units**	**Size**	**In**	**Out**	**Total**	**In**	**Out**	**Total**		**In**	**Out**	**Total**	**In**	**Out**	**Total**	**TDT**
Convenience Store/Gas Station - GFA (5.5-10k)	945	Fueling Positions	16.00	50%	50%	26.90	50%	50%	26.90	345.75	215	215	**430**	215	215	**430**	**5,532**
Truck Stop	950	Fueling Positions	6.00	53%	47%	15.42	53%	47%	15.42	224	49	44	**93**	49	44	**93**	**1,344**
EV Charging Station	N/A	Charging Station	2.00	50%	50%	4.00	50%	50%	4.00	224	4	4	**8**	4	4	**8**	**80**
										Total	**268**	**263**	**531**	**268**	**263**	**531**	**6,956**

Appendix E: SBCTA Screening Tool Results


SBCTA VMT Screening Tool
Powered by Fehr & Peers
User's Guide
Halloran Summit Rd, Nipton, CA
Show search results for Halloran Sum...
Complete #1 - 4, Then Click 'Run'
Parcels
#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
OD VMT Per Service Population
Baseline Year*
2023
Threshold (% reduction from baseline year)*
Below City Baseline (0%)
Help
Run
Map Layers
Project Area VMT
Screening Results
Low VMT Generating TAZs
Parcels
Jurisdiction Boundaries
TAZ
Transit Priority Area
(1 of 2)
Completely within a TPA? No (Fail)
Within a low VMT generating TAZ? No (Fail)
Note Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.
Zoom to
Halloran Summit Rd
4137 ft
4139 ft
300ft
-115.788 35.402 Degrees
Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri,


SBCTA VMT Screening Tool
Powered by Fehr & Peers
User's Guide
Halloran Summit Rd, Nipton, CA
Show search results for Halloran Sum...
Complete #1 - 4, Then Click 'Run'
Parcels
#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
OD VMT Per Service Population
Baseline Year*
2023
Threshold (% reduction from baseline year)*
Below City Baseline (0%)
Help
Run
(2 of 2)
Assessor Parcel Number (APN) 057006126
Traffic Analysis Zone (TAZ) 53885101
TAZ VMT 194.5
Jurisdiction VMT 44.7
% Difference 335.15%
VMT Metric OD VMT Per Service Population
Threshold 44.7
Zoom to
Map Layers
Project Area VMT
Screening Results
Low VMT Generating TAZs
Parcels
Jurisdiction Boundaries
TAZ
Transit Priority Area
Yucca Grove
Halloran Summit Rd
4137 ft
4139 ft
300ft
-115.785 35.405 Degrees
Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri,

Appendix F: Crash Data

Memorandum

Making Conservation a California Way of Life.

To: ZUSSANE RAYA
CUSTODIAN OF RECORD

FWD TO: RAUNAK BETALA
ENGINEERING INTERN II

Date: November 22, 2023

File: 08-SBD-I-15
NB and SB Ramps at Halloran Summit Road
PM 155.362-155.795

From: MARY PADRES
Office Chief
District 8 Traffic Operations
Surveillance Region C

Subject: **COLLISION DATA FOR TRAFFIC SAFETY REVIEW**

The data provided is protected by 23 U.S.C. § 407, and the data shall not be subject to discovery, nor admitted as evidence in any applicable legal proceeding against the State of California. The State of California, Department of Transportation does not, by allowing the release of this information waive any rights it has under 23 U.S.C. § 407.

This Traffic Accident Surveillance and Analysis System (TASAS) covers the following location(s):

I-015 NB and SB Ramps at Halloran Summit Road PM 155.362-PM 155.795

Table 1A summarizes crash rates for the segments of the project on I-015 northbound (NB) Ramps and I-015 southbound (SB) Ramps at Halloran Summit Road from PM 15.362 to PM 15.795. The Table B report were generated on 11/16/2023, and they depict existing crash rates per million vehicles for the most recent 36-month period from 04/01/2020 to 03/31/2023 from the Traffic Accident Surveillance and Analysis System (TASAS).

TABLE 1A

TASAS Table B Crash Rates (04/01/2020 – 03/31/2023)

Segment	TOTAL No. of Crashes	ACTUAL (Per million vehicles)			AVERAGE (Per million vehicles)		
		Fatal Crashes	Fatal + Injury Crashes	Total (1)	Fatal Crashes	Fatal + Injury Crashes	Total (1)
I-015 NB Off Ramp to Halloran Summit Road PM 155.362	2	0.000	0.00	4.57	0.009	0.48	1.31
I-015 SB On Ramp fr. Halloran Summit Road PM 155.368	0	0.000	0.00	0.00	0.005	0.22	0.63
I-015 NB On Ramp fr. Halloran Summit Road PM 155.787	0	0.000	0.00	0.00	0.005	0.22	0.63
I-015 SB Off Ramp to Halloran Summit Road PM 155.795	0	0.000	0.00	0.00	0.009	0.48	1.31

(1) All reported crashes (includes Property Damage Only (PDO) Crashes)

Table 1A above summarizes and compares the actual crash rates for the segment on I-015 northbound (NB) Ramps and I-015 southbound (SB) Ramps at Halloran Summit Road from PM 155.362 to PM 155.795 to the average rates for similar facilities throughout the State. The Total crash rates include all reported crashes: Fatal, Injury, and Property Damage.

I-015 NB Off Ramp to Halloran Summit Road PM 155.362:

Analysis of the TASAS Table B records shows a total of 2 crashes within the segment I-015 NB Off Ramp to Halloran Summit Road at PM 155.362 and study periods summarized above, with a total rate of fatal related crashes that is below the average for similar facilities statewide, a total rate of fatal and injury related crashes that is below the average for similar facilities statewide, and a total rate of crashes that is above the average for similar facilities statewide.

Detailed analysis per the TASAS Selective Accident Retrieval (TSAR) generated on 11/16/2023 shows that the primary and only crash factor in the segment were:

- "Improper Turn,"

The types of collisions retrieved includes:

- Rear-End
- Hit Object

In addition, this segment was not flagged in TASAS Table C. Table C identifies high crash frequency spot locations with either Type 'W' (Wet) crashes or Type 'A' (All) crashes where four or more significant crashes within twelve, six, or a three- month period have occurred.

I-015 SB On Ramp from Halloran Summit Road PM 155.368:

Analysis of the TASAS Table B records shows a total of 0 crashes within the segment I-015 SB On Ramp from Halloran Summit Road at PM 155.368 and study periods summarized above, with a total rate of fatal related crashes that is below the average for similar facilities statewide, a total rate of fatal and injury related crashes that is below the average for similar facilities statewide, and a total rate of crashes that is below the average for similar facilities statewide.

In addition, this segment was not flagged in TASAS Table C. Table C identifies high crash frequency spot locations with either Type 'W' (Wet) crashes or Type 'A' (All) crashes where four or more significant crashes within twelve, six, or a three- month period have occurred.

I-015 NB On Ramp from Halloran Summit Road PM 155.787:

Analysis of the TASAS Table B records shows a total of 0 crashes within the segment I-015 NB On Ramp from Halloran Summit Road at PM 155.787 and study periods summarized above, with a total rate of fatal related crashes that is below the average for similar facilities statewide, a total rate of fatal and injury related

crashes that is below the average for similar facilities statewide, and a total rate of crashes that is below the average for similar facilities statewide.

In addition, this segment was not flagged in TASAS Table C. Table C identifies high crash frequency spot locations with either Type 'W' (Wet) crashes or Type 'A' (All) crashes where four or more significant crashes within twelve, six, or a three- month period have occurred.

I-015 SB Off Ramp to Halloran Summit Road PM 155.795:
Analysis of the TASAS Table B records shows a total of 0 crashes within the segment I-015 SB Off Ramp to Halloran Summit Road at PM 155.795 and study periods summarized above, with a total rate of fatal related crashes that is below the average for similar facilities statewide, a total rate of fatal and injury related crashes that is below the average for similar facilities statewide, and a total rate of crashes that is below the average for similar facilities statewide.

In addition, this segment was not flagged in TASAS Table C. Table C identifies high crash frequency spot locations with either Type 'W' (Wet) crashes or Type 'A' (All) crashes where four or more significant crashes within twelve, six, or a three- month period have occurred.

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