Maverik Fueling Station Traffic Impact Analysis

City of Pinon Hills, California

October 14, 2025

Prepared by:

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CONSULTANTS

October 14, 2025

Mr. Jeremy Johnson
COUNTY OF SAN BERNARDINO
825 East Third Street
San Bernardino, CA 92415

Subject: Traffic Impact Analysis – Maverik Fueling Station, City of Pinon Hill

Dear Mr. Johnson:

TJW ENGINEERING, INC. (TJW) is pleased to present you with this traffic impact analysis for the proposed project, Maverik Fueling Station, located on Oasis Road south of Highway 138 in Pinon Hills within the County of San Bernardino.

This traffic study has been prepared to meet the traffic study requirements for the County of San Bernardino and assess the forecast traffic operations associated with the proposed project and its impact on the local street network. This report is being submitted to you for review and forwarding to the County of San Bernardino.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
Principal Engineer
Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*

David Chew, PTP
Transportation Planner

Tiffany Chang, EIT
Project Engineer

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1.0 EXECUTIVE SUMMARY

This traffic impact analysis (TIA) analyzes the projected traffic operations associated with the proposed project, Maverik Fueling Station, located on Oasis Road south of Highway 138 in the city of Pinon Hills within the County of San Bernardino. The purpose of this TIA is to evaluate potential circulation system deficiencies that may result from the development of the proposed project, and to recommend improvements to achieve acceptable operations, if applicable. This analysis has been prepared in coordination with the County of San Bernardino via a scoping agreement (See **Appendix A**) and is pursuant to applicable *San Bernardino County Transportation Authority Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (SBCTA Guidelines) (February 2020) and the *San Bernardino County Transportation Impact Guidelines* (County Guidelines) (July 2019).

The proposed project includes a gasoline station with fueling pumps for five (5) truck and twenty (20) standard passenger vehicles, and a 5,637 square foot convenience store. Site access is planned via one right in/out driveway off Oasis Road and two full access driveways off Buckthorne Road. The site is currently zoned as CG for General Commercial per the Public San Bernardino County Zoning Map. The project site is currently vacant. The proposed project is anticipated to be built and generating trips in 2026.

The proposed project is projected to generate 2,569 daily trips, 204 AM peak hour trips, and 192 PM peak hour trips.

The following twelve (12) intersections and one (1) roadway segment in the vicinity of the project site have been included in the level of service (LOS) analysis:

Intersections:

1. Oasis Road/Route 138
2. Oasis Road/Buckthorne Road
3. Project Driveway #1/Buckthorne Road
4. Project Driveway #2/Buckthorne Road
5. Oasis Road/Project Driveway #3
6. Mountain Road/Route 138
7. Soledad Road/Route 138
8. 263rd Street East/Route 138
9. Ponderosa Road/Route 138
10. Desert View Road/Route 138
11. Acorn Road/Route 138
12. Green Road-Phelan Road/Route 138

Roadway Segment:

1. Oasis Road between Route 138 and Buckthorne Road

The study intersections are analyzed for the following study scenarios:

- Existing Traffic Conditions (Existing)
- Opening Year Traffic Condition (Existing + Ambient Growth + Cumulative Projects)
- Opening Year Traffic Plus Project Condition (Existing + Ambient Growth + Cumulative Projects + Proposed Project).
- Horizon Year Traffic Condition (Existing + Annual Growth Rate)
- Horizon Year Traffic Plus Project Condition (Existing + Annual Growth Rate + Project)

1.1 SUMMARY OF LEVEL OF SERVICE ANALYSIS RESULTS

Table ES-1 summarizes the results of the intersection level of service analysis based on the County Guidelines thresholds of significance for analyzing transportation deficiencies.

Table ES-1

Summary of Transportation Deficiencies at Study Intersections

Intersection			Peak Hour	Existing		Opening Year No Project		Opening Year With Project		Horizon Year No Project		Horizon Year With Project	
1	Oasis Road	Route 138	AM	29.92	C	30.11	C	34.43	C	31.97	C	43.84	D
			PM	31.54	C	33.81	C	34.20	C	47.52	D	48.56	D
2	Oasis Road	Buckthorne Road	AM	8.43	A	8.42	A	9.87	A	8.43	A	9.82	A
			PM	8.50	A	8.50	A	10.34	B	8.97	A	10.00	B
3	Project Dwy #1	Buckthorne Road	AM	-	-	-	-	8.75	A	-	-	8.75	A
			PM	-	-	-	-	8.73	A	-	-	8.73	A
4	Project Dwy #2	Buckthorne Road	AM	-	-	-	-	9.17	A	-	-	9.17	A
			PM	-	-	-	-	9.12	A	-	-	9.12	A
5	Oasis Road	Project Dwy #3	AM	-	-	-	-	8.53	A	-	-	8.53	A
			PM	-	-	-	-	8.53	A	-	-	8.53	A
6	Route 138	Mountain Road	AM	13.54	B	15.21	C	26.79	D	35.16	E	41.10	E
			PM	18.39	C	21.48	C	23.28	C	90.09	F	112.68	F
7	Route 138	Soledad Road	AM	13.10	B	14.08	B	14.63	B	19.10	C	19.98	C
			PM	15.42	C	16.72	C	17.44	C	26.58	D	28.09	D
8	Route 138	263rd Street East	AM	12.74	B	13.83	B	14.28	B	18.54	C	19.29	C
			PM	13.32	B	14.77	B	15.35	C	21.69	C	22.87	C
9	Route 138	Ponderosa Road	AM	14.14	B	15.40	C	16.21	C	18.71	C	19.70	C
			PM	15.37	C	16.71	C	17.47	C	29.25	D	30.75	D
10	Route 138	Desert View Road	AM	16.50	C	18.32	C	20.16	C	23.81	C	30.62	D
			PM	15.47	C	16.90	C	19.97	C	31.05	D	35.46	E

Intersection			Peak Hour	Existing		Opening Year No Project		Opening Year With Project		Horizon Year No Project		Horizon Year With Project	
11	Route 138	Acorn Road	AM	15.34	B	16.84	C	18.05	C	19.23	C	21.05	C
			PM	17.81	C	19.73	C	19.45	C	30.82	D	34.84	D
12	Route 138	Green Road – Phelan Road	AM	20.11	C	22.51	C	22.77	C	19.09	B	22.49	C
			PM	21.69	C	21.93	C	22.79	C	20.27	C	22.43	C

Existing Traffic Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Existing* traffic conditions.

Opening Year Traffic Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Opening Year* traffic conditions.

Opening Year Plus Project Traffic Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Opening Year Plus Project* traffic conditions

Horizon Year Traffic Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Horizon Year* traffic conditions with the exception of:

- Intersection 6: Mountain Road/Route 138

Horizon Year Plus Project Traffic Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Horizon Year Plus Project* traffic conditions with the exception of:

- Intersection 6: Mountain Road / Route 138
- Intersection 10: Desert View Road / Route 138

Although intersection 10, Desert View Road and Route 138, is projected to operate at an unacceptable LOS, the trips generated by the project do not surpass the 5.0 second delay threshold. Therefore, per county guidelines, improvements are not required.

1.2 SUMMARY OF IMPROVEMENTS

Analysis of the study intersections found that the following intersections operate below the acceptable LOS and have more than a 5.0 second delay resulting from the trips generated by the proposed project, per *County Guidelines* criteria, will require improvements for *Horizon Year Plus Project* conditions. These intersections are;

- Intersection 6: Mountain Road / Route 138 – **Install Signal**

The study intersection 10, Desert View Road and Route 138 is projected to operate at an unacceptable LOS. However, the trips generated by the project do not surpass the 5.0 second delay threshold and therefore will not require improvements in the *Horizon Year Plus Project* scenario.

Table ES-2

Summary of Improvements and Project Fair Share

Intersection			Improvement	Scenario	Peak Hour	Existing Volume	Total Volume	Project Volume	Project % of Fair Share
6	Mountain Road	Route 138	Install Signal	Horizon Year Plus Project	AM	1005	1937	71	7.62%
					PM	1198	2247	69	6.58%

Table ES-3

Intersection Analysis – Horizon Year Plus Project with Improvements

Intersection			Improvement	Peak Hour	Horizon Year Plus Project		Horizon Year Plus Project With Improvements Conditions	
					Delay[1]	LOS	Delay[1]	LOS
6	Mountain Road	Route 138	Install Signal	AM	41.10	E	16.00	B
				PM	112.68	F	25.03	C

1.3 ON-SITE ROADWAY AND SITE ACCESS IMPROVEMENTS

Wherever necessary, roadways adjacent to the proposed project site and site access points will be constructed in compliance with recommended roadway classifications and respective cross-sections in the County of San Bernardino General Plan or as directed by the County Engineer.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and County sight distance standards at the time of final grading, landscaping, and street improvement plans.

Signing/striping should be implemented in conjunction with detailed construction plans for the project site.

2.0 INTRODUCTION

This traffic impact analysis (TIA) analyzes the projected traffic operations associated with the proposed project, Maverik Fueling Station, located on Oasis Road south of Highway 138 in the city of Pinon Hills within the County of San Bernardino. The purpose of this TIA is to evaluate potential circulation system deficiencies that may result from the development of the proposed project, and to recommend improvements to achieve acceptable operations, if applicable. This analysis has been prepared in coordination with the County of San Bernardino via a scoping agreement (See **Appendix A**) and is pursuant to applicable *San Bernardino County Transportation Authority Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (SBCTA Guidelines) (February 2020) and the *San Bernardino County Transportation Impact Guidelines* (County Guidelines) (July 2019).

2.1 PROJECT DESCRIPTION

The proposed project includes a gasoline station with fueling pumps for five (5) truck and twenty (20) standard passenger vehicles, and a 5,637 square foot convenience store. Site access is planned via one right in/out driveway off Oasis Road and two full access driveways off Buckthorne Road. The site is currently zoned as CG for General Commercial per the Public San Bernardino County Zoning Map. The project site is currently vacant. The proposed project is anticipated to be built and generating trips in 2026. **Exhibit 1** shows the proposed project site location. **Exhibit 2** shows the project site plan.

2.2 STUDY AREA

The following twelve (12) intersections and one (1) roadway segments in the vicinity of the project site have been included in the level of service (LOS) analysis:

Intersections:

1. Oasis Road/Route 138
2. Oasis Road/Buckthorne Road
3. Project Driveway #1/Buckthorne Road
4. Project Driveway #2/Buckthorne Road
5. Oasis Road/Project Driveway #3
6. Mountain Road/Route 138
7. Soledad Road/Route 138
8. 263rd Street East/Route 138
9. Ponderosa Road/Route 138
10. Desert View Road/Route 138
11. Acorn Road/Route 138
12. Green Road-Phelan Road/Route 138

Roadway Segment:

1. Oasis Road between Route 138 and Buckthorne Road

The study intersections and roadway segments are all located within the County of San Bernardino. These are analyzed for the following study scenarios:

- Existing Traffic Conditions (Existing);
- Background Traffic Conditions (Existing + Ambient Growth + Cumulative Projects)
- Background Plus Projects Traffic Conditions (Background traffic + Proposed Project)
- Horizon Year Traffic Conditions (Existing + Annual Growth)
- Horizon Year Plus Project Traffic Conditions (Existing + Annual Growth + Proposed Project)

Traffic operations are evaluated for the following time periods:

- Weekday AM Peak Hour occurring between 7:00 AM to 9:00 AM; and
- Weekday PM Peak Hour occurring between 4:00 PM to 6:00 PM.

2.3 ANALYSIS METHODOLOGY

2.3.1 Intersection Analysis Methodology

The traffic analysis focuses on the project's off-site traffic-related impacts at the traffic study area intersections and on the study area roadway segments. In accordance with the County Guidelines, intersection operation for both signalized and unsignalized intersections is evaluated using the methodology of the Highway Capacity Manual (HCM) 7th Edition (Transportation Research Board, 2022).

The Highway Capacity Manual uses Level of Service (LOS) to describe the quality of flow on roadways and at intersections using a range from LOS A, or very favorable progression, to LOS F, or very poor progression. The LOS definitions for interruption of traffic flow differ depending on the type of traffic control (traffic signal, unsignalized intersection with side street stops, unsignalized intersection with all-way stops).

The Highway Capacity Manual LOS ranges for signalized intersections is based on the intersection's average control delay for all movements at the intersection during the peak hour. Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Table 1 identifies each Level of Service category with the corresponding general characteristics of traffic flow plus accompanying delay ranges at signalized intersections.

Table 1

HCM – LOS & Delay Thresholds – Signalized Intersections

Level of Service	Description	Delay (in seconds)
A	Very favorable progression: most vehicles arrive during green signal and do not stop. Short cycle lengths.	0 – 10.00
B	Good progression, short cycle lengths. More vehicles stop than for LOS A.	10.01 – 20.00
C	Fair progression; longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant, though many vehicles still pass through without stopping.	20.01 – 35.00
D	Progression less favorable, longer cycle length and high flow/capacity ratio. The proportion of vehicles that pass through without stopping diminishes. Individual cycle failures are obvious.	35.01 – 55.00
E	Severe congestion with some long-standing queues on critical approaches. Poor progression, long cycle lengths and high flow/capacity ratio. Individual cycle failures are frequent.	55.01 – 80.00
F	Very poor progression, long cycle lengths and many individual cycle failures. Arrival flow rates exceed capacity of intersection.	> 80.01

Source: Transportation Research Board, *Highway Capacity Manual*, HCM 7th Edition (Washington D.C., 2022).

The Highway Capacity Manual LOS range for unsignalized intersections is based on the weighted average control delay expressed in seconds per vehicle. At a two-way or side-street stop-controlled intersection, LOS is calculated for each stop-controlled minor street movement, for the left-turn movement(s) from the major street, and for the intersection as a whole. For approaches consisting of a single lane, the delay is calculated as the average of all movements in that lane. For all-way stop-controlled intersections, LOS is computed for the intersection as a whole. **Table 2** describes the general characteristics of traffic flow and accompanying delay ranges at unsignalized intersections.

Table 2

HCM – LOS & Delay Thresholds – Unsignalized Intersections

Level of Service	Description	Delay (in seconds)
A	Little or no delays.	0 – 10.00
B	Short traffic delays.	10.01 – 15.00
C	Average traffic delays.	15.01 – 25.00
D	Long traffic delays. Multiple vehicles in queue.	25.01 – 35.00
E	Very long delays. Demand approaching capacity of intersection	35.01 – 50.00
F	Very constrained flow with extreme delays and intersection capacity exceeded.	> 50.01

Source: Transportation Research Board, *Highway Capacity Manual*, HCM 7th Edition (Washington D.C., 2022).

This study utilizes *PTV Vistro 2022* analysis software for all signalized and unsignalized intersections. Vistro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis specified in Chapter 16 of the HCM. The level of service and capacity analysis performed within Vistro takes into consideration the optimization and coordination of signalized and unsignalized intersections within a network.

2.3.2 Roadway Segment Analysis Methodology

LOS for roadway segments is based on volume/capacity ratio (V/C). Since no roadway capacity information was found for the County of San Bernardino the Roadway capacities have been referenced from the *County of Riverside Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled, Appendix D (December 2020)*. The capacities for each type of facility are defined below in **Table 3** presents the LOS range based on daily roadway segment capacity.

Table 3
HCM – LOS & Capacity Thresholds – Roadway Capacity

Facility Type	Number of Lanes	LOS C Capacity (Vehicles Per Day)	LOS D Capacity (Vehicles Per Day)	LOS E Capacity (Vehicles Per Day)
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial	2	14,400	16,200	18,000
Arterial	4	28,700	32,300	35,900
Mountain Arterial	2	12,900	14,500	16,100
Mountain Arterial	3	16,700	18,800	20,900
Mountain Arterial	4	29,800	33,500	37,200
Urban Arterial	4	28,700	32,300	35,900
Urban Arterial	6	43,100	48,500	53,900
Urban Arterial	8	57,400	64,600	71,800
Expressway	4	32,700	36,800	40,900
Expressway	6	49,000	55,200	61,300
Expressway	8	65,400	73,500	81,700
Freeway	4	61,200	68,900	76,500
Freeway	6	94,000	105,800	117,500
Freeway	8	128,400	144,500	160,500
Freeway	10	160,500	180,500	200,600
Ramp[4]	1	16,000	18,000	20,000

1. All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.
2. Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables as defined in the Riverside County Congestion Management Program.
3. Two-lane roadways designated as future arterials that conform to arterial design standards for vertical and horizontal alignments are analyzed as arterials.
4. Ramp capacity is given as a one-way traffic volume.

Table 4 describes the LOS and V/C ranges for roadway segments.

Table 4
LOS & V/C Ranges – Roadway Segments

Level of Service	Volume/Capacity Ratio
A	0.00 - 0.60
B	> 0.60 – 0.70
C	> 0.70 – 0.80
D	> 0.80 – 0.90
E	> 0.90 – 1.00
F	> 1.00

2.4 PERFORMANCE CRITERIA

2.4.1 Signalized Intersections

Consistent with the acceptable LOS for the Desert, Valley, and Mountain regions as described in the General Plan, the County should consider the following signalized intersection criteria for application in a traffic study. Please note that this will be completed to demonstrate General Plan Consistency. Specific CEQA thresholds, which are based on VMT requirements, are described later in this memorandum.

• Any signalized study intersection in the Valley or Mountain regions that is operating at an acceptable LOS D or better without project traffic in which the addition of project traffic causes the intersection to degrade to an LOS E or F shall identify improvements to improve operations to LOS D or better.

• Any signalized study intersection in the Desert region that is operating at an LOS C or better without project traffic in which the addition of project traffic causes the intersection to degrade to an LOS D, E, or F shall identify improvements to improve operations to LOS C.

• Any signalized study intersection in the Valley or Mountain regions that is operating at LOS E or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

• Any signalized study intersection in the Desert region that is operating at LOS D, E, or F without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

2.4.2 Unsignalized Intersections

Consistent with the acceptable LOS for the Desert, Valley, and Mountain regions as described in the current General Plan, the County should consider the following unsignalized intersection criteria when identifying operational deficiencies:

An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur: a) The addition of project related traffic causes the intersection to degrade from an LOS D or better to a LOS E or worse in the Valley and Mountain regions or from an LOS C or better to an LOS D or worse in the Desert region.

OR

b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at an LOS E or F in the Valley and Mountain regions or at an LOS D, E, or F in the Desert region (per Section 10.5.2 b))

AND

c) One or both of the following conditions are met:

1) The project adds ten (10) or more trips to any minor street approach
2) The intersection meets the peak hour traffic signal warrant after the addition of project traffic (per Section 10.5.2 c)).

If the conditions above are satisfied, improvements should be identified that achieve the following:

• In the Valley and Mountain regions, improvements should be identified that would achieve LOS D or better for case a) above or to pre-project LOS and delay for case b) above.

• In the Desert region, improvements should be identified that would achieve LOS C or better for case a) above or to pre-project LOS and delay for case b) above

2.4.3 Roadway Segments

Consistent with the acceptable LOS for the Desert, Valley, and Mountain regions as described in the current General Plan, the County should consider the following roadway segment thresholds and improvement requirements:

• Any study roadway segment in the Valley or Mountain regions that is operating at an LOS D or better without project traffic in which the addition of project traffic causes the segment to degrade to an LOS E or F should identify improvements to achieve LOS D.

• Any study roadway segment in the Desert region that is operating at an LOS C or better without project traffic in which the addition of project traffic causes the segment to degrade to an LOS D, E, or F should identify improvements to achieve LOS D.

• Any roadway segment that operates unacceptably in the no project scenario where the project adds traffic in excess of 5% of the roadway capacity (e.g. a volume-to-capacity ratio increase of 0.05) should identify improvements to add capacity to the segment.

Legend:

- - - - Project Site

(#) Study Intersection Location

Exhibit 1: Project Location

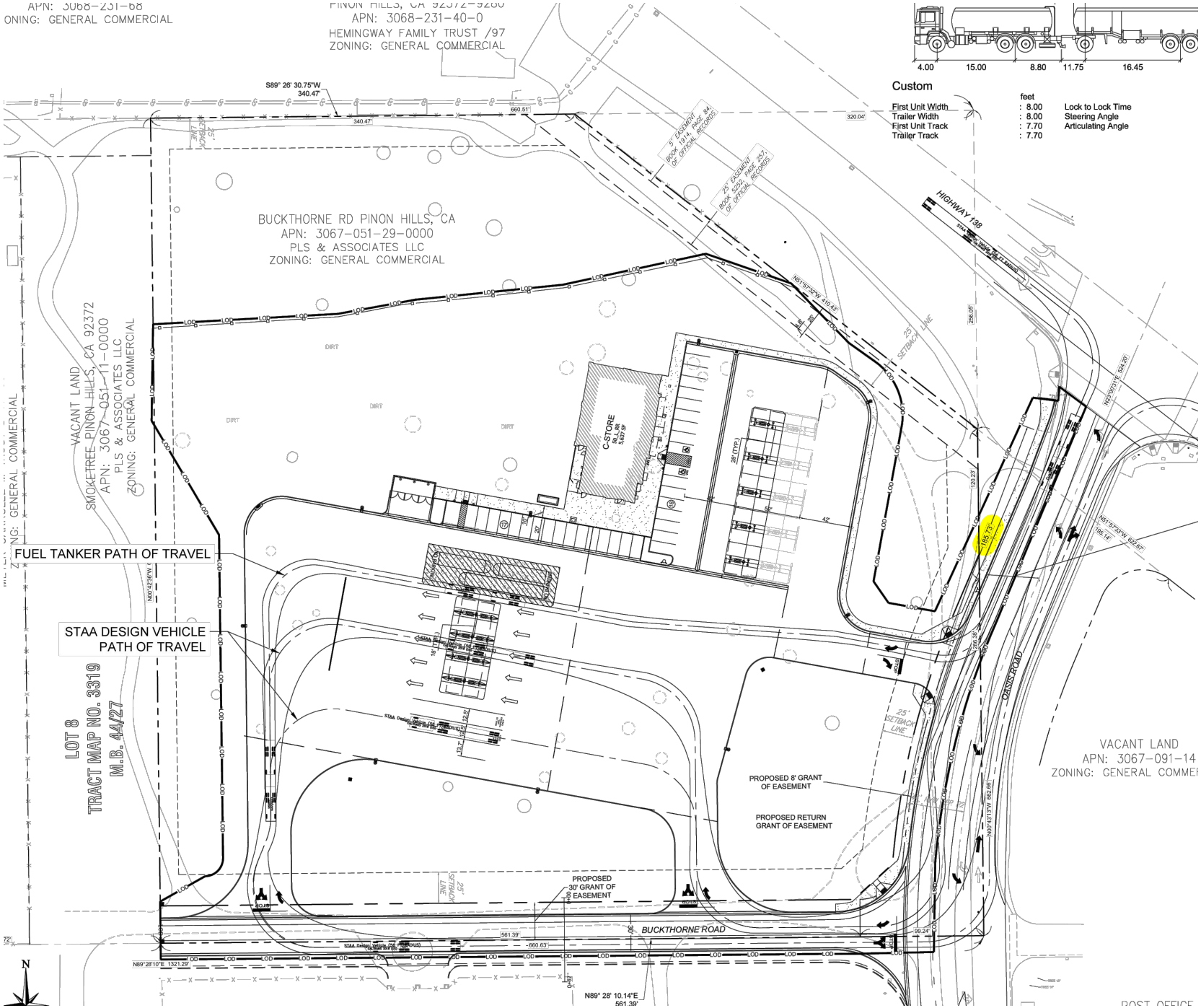

Exhibit 2: Proposed Project Site Plan

Not to Scale

3.0 EXISTING CONDITIONS

3.1 EXISTING CIRCULATION NETWORK/STUDY AREA CONDITIONS

The characteristics of the roadway system within the vicinity of the project site are described in **Table 5.**

Table 5

Roadway Characteristics within Study Area

Roadway	Classification[1]	Jurisdiction	Direction	Existing Travel Lanes	Median Type[2]	Speed Limit (mph)	On-Street Parking
Oasis Road	Major Highway	County of San Bernardino	North-South	2	PM	35	No
Route 138	Major Arterial Highway	County of San Bernardino	East-West	2-4	TWLT	50-55	No
Buckthorne Road	Local Roadway	County of San Bernardino	East West	2	NM	-	No
Mountain Road	Local Roadway	County of San Bernardino	North-South	2	NM	-	No
Soledad Road	Local Roadway	County of San Bernardino	North-South	2	NM	-	No
263rd Street	Local Roadway	County of San Bernardino	North-South	2	NM	-	No
Ponderosa Road	Local Roadway	County of San Bernardino	North-South	2	NM	-	No
Desert View Road	Local Roadway	County of San Bernardino	North-South	2	NM	-	No
Acorn Road	Local Roadway	County of San Bernardino	North-South	2	NM	-	No
Green Road-Phelan Road	Major Highway	County of San Bernardino	East-West	2	NM	55	No

1: Source: San Bernardino County Land Use Plan General Plan Circulation and Transportation Victor Valley Region
2: TWLTL = Two-Way Left-Turn Lane, RM= Raised Median, NM = No Median. PM = Painted Median

Exhibit 3 shows the existing conditions of the study area intersection controls and roadway geometry.

3.2 COUNTY OF SAN BERNARDINO GENERAL PLAN CIRCULATION ELEMENT

The proposed project site is located within the County of San Bernardino. **Appendix A** contains the current *County of San Bernardino General Plan* and an explanation of roadway cross sections.

3.3 EXISTING BICYCLE AND PEDESTRIAN FACILITIES

Within the study area, there are no existing bicycle facilities or pedestrian facilities.

3.4 EXISTING PUBLIC TRANSIT SERVICES

The City of Pinon Hills is served by the Victor Valley Transit Authority (VVTA) which provides transit service through the City of Pinon Hills. However, there are no stops in the vicinity of the proposed project.

3.5 EXISTING TRAFFIC VOLUMES

To determine the existing operation of the study intersections, AM and PM peak period traffic volumes were estimated based on new traffic counts collected on April 24, 2024. Detailed traffic count data is provided in **Appendix B**.

Exhibit 4 and **Exhibit 5** show existing AM and PM peak hour volumes at the study intersections.

3.6 EXISTING CONDITIONS INTERSECTION LEVEL OF SERVICE ANALYSIS

Existing conditions AM and PM peak hour intersection analysis is shown in **Table 6**. Calculations are based on the existing geometrics at the study area intersections as shown in **Exhibit 3.** HCM analysis sheets are provided in **Appendix C**.

Table 6

Intersection Analysis – Existing Conditions

Intersection			Control Type	Peak Hour	Existing Conditions	
					Delay (s/veh)	LOS
1	Oasis Road	Route 138	Signal	AM	29.92	C
				PM	31.54	C
2	Oasis Road	Buckthorne Road	TWSC	AM	8.43	A
				PM	8.50	A
3	Project Driveway #1	Buckthorne Road	TWSC	AM	-	-
				PM	-	-
4	Project Driveway #2	Buckthorne Road	TWSC	AM	-	-
				PM	-	-
5	Oasis Road	Project Driveway #3	TWSC	AM	-	-
				PM	-	-
6	Mountain Road	Route 138	TWSC	AM	13.54	B
				PM	18.39	C
7	Soledad Road	Route 138	TWSC	AM	13.10	B
				PM	15.42	C
8	263rd Street East	Route 138	TWSC	AM	12.74	B
				PM	13.32	B
9	Ponderosa Road	Route 138	TWSC	AM	14.14	B
				PM	15.37	C
10	Desert View Road	Route 138	TWSC	AM	16.50	C
				PM	15.47	C
11	Acorn Road	Route 138	TWSC	AM	15.34	B
				PM	17.81	C

Intersection			Control Type	Peak Hour	Existing Conditions	
					Delay (s/veh)	LOS
12	Green Road-Phelan Road	Route 138	Signal	AM	20.11	C
				PM	21.69	C

Note: TWSC = Two-Way Stop-Control; Delay shown in seconds per vehicle.

1 = Per the Highway Capacity Manual 7th Edition, for signalized intersection, the overall average delay and LOS are shown. For intersections with one or two-way stop-control, the delay and LOS for the worst individual movement is shown.

As shown in **Table 6**, the study intersections are currently operating at an acceptable LOS during the AM and PM peak hours.

3.7 EXISTING CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

The roadway segment level of service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Existing Conditions are shown in **Table 7**. Review of this table indicates that the study roadway segment Oasis Road between Route 138 and Buckthorne Road is currently operating at an acceptable level of service (LOS D or better) on a daily basis.

Table 7

Roadway Segment – Existing Conditions

Roadway	Segment	Classification	Existing Travel Lanes	LOS E Capacity	Existing ADT	V/C	LOS
Oasis Road	Between Route 138 and Buckthorne Road	Major Highway	2	13,650	1,074	0.08	A