



**Appendix I-1**

**Harley Knox Industrial Project (DPR 21-00008) Access Study**

**Ganddini Group**

**March 30, 2022**



March 30, 2022

Mr. Michael Johnson, Principal  
CRG – LCI HARLEY KNOX, LLC  
1302 Brittany Cross Road  
Santa Ana, California 92705

**RE: Harley Knox Industrial Project (DPR 21-00008) Access Study**  
Project No. 19436

Dear Mr. Johnson:

Ganddini Group, Inc. is pleased to provide this access analysis for the proposed Harley Knox Industrial Project (DPR 21-00008) in the City of Perris. We trust the findings of this analysis will aid the City of Perris in assessing the proposed project.

#### **PROJECT DESCRIPTION**

The 6.71-acre project site is located at the northwest corner of Las Palmas Avenue and Harley Knox Boulevard in the City of Perris, California. The project location map is shown on Figure 1. The project site is currently vacant.

The proposed project involves construction of a new 142,995 square foot industrial warehousing building. The project proposes one right turns in/out only access for passenger vehicles to Harley Knox Boulevard, and one full access for trucks to Las Palmas Avenue. The proposed site plan is illustrated on Figure 2.

#### **TRIP GENERATION**

Table 1 shows the project trip generation forecast based on rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for ITE Land Use Code 150 - Warehousing were determined to adequately represent the proposed use and were selected for calculation of the project trip generation forecast. The number of trips generated is determined by multiplying the trip generation rates and directional distributions by the land use quantity.

As shown in Table 1, the proposed project is forecast to generate approximately 244 daily vehicle trips, including 25 vehicle trips during the AM peak hour and 24 vehicle trips during the PM peak hour.

#### **Truck Trips**

The project trip generation was also calculated in terms of Passenger Car Equivalent (PCE) trips. The percentage of truck trips and the truck mix by axle type was determined based on South Coast Air Quality Management District (SCAQMD) recommendations for high-cube warehousing facilities without cold-storage. Truck trips were converted to PCE trips based on the following factors: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

As also shown in Table 1, the proposed project is forecast to generate approximately 348 daily PCE trips, including 35 PCE trips during the AM peak hour and 34 PCE trips during the PM peak hour.

### TRIP DISTRIBUTION AND ASSIGNMENT

Figure 3 to Figure 5 illustrate the forecast directional distribution patterns of project-generated trips based on review of the existing roadway facilities in the project vicinity and the City of Perris truck route map. Figure 6 shows the project trip assignment for the intersection of Las Palmas Avenue at Harley Knox Boulevard

### LEVEL OF SERVICE ANALYSIS

#### Level of Service Analytical Methodology (Non-CEQA)

Level of Service analysis is performed for assessing conformance with General Plan and operational standards established by the applicable agencies. In accordance with current CEQA provisions, a project's effect on automobile delay (as measured by Level of Service) shall not constitute a significant environmental impact.

#### Intersection Delay Methodology

The technique used to assess the performance of intersections is known as the intersection delay methodology based on the procedures contained in the *Highway Capacity Manual* (Transportation Research Board, 6th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. The intersection control delay is then correlated to Level of Service based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board, *Highway Capacity Manual* (6th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst individual movement (or movements sharing a single lane). Intersection delay and Level of Service calculations were performed using the Vistro software.

## Performance Standards

The City of Perris has established Level of Service D as the minimum acceptable Level of Service along all City maintained roads (including intersections) and Level of Service D along I-215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is Level of Service E at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway, or at I-215 freeway ramps. Level of Service E may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations.

## Substantial Operational Deficiency Criteria

The following criteria are used to determine whether a project causes a substantial operational deficiency and should be required to provide improvements or corrective measures.

In the City of Perris, a project is considered to result in a substantial operational deficiency at a study intersection if one or more of the following conditions are satisfied:

- The addition of 50 or more peak hour project generated trips is forecast to cause an intersection to deteriorate from acceptable Level of Service (D or better) to unacceptable Level of Service (E or F); or,
- The addition of 50 or more peak hour project generated trips worsens the delay by 2 seconds or more at an intersection operating at an unacceptable Level of Service (E or F) in the baseline condition.
- A cumulative impact is considered significant when a study intersection is forecast to operate at an unacceptable Level of Service (E or F) with the addition of cumulative/background traffic and 50 or more peak hour project trips.

If a project is forecast to result in a substantial operational deficiency, recommended corrective measures are identified that would reduce the project's effect to a level that does not exceed the specified deficiency criteria. Corrective measures can be in many forms, including the construction of physical improvements (e.g., addition of travel lanes, traffic control modifications, etc.) or the implementation of transportation demand management measures.

## Existing Roadway Volumes

Figure 7 shows the Existing AM and PM peak hour intersection turning movement volumes. Existing peak hour intersection volumes are based upon AM peak period and PM peak period intersection turning movement counts obtained in January 2022 during typical weekday conditions. The weekday AM peak period was counted between 7:00 AM and 9:00 AM and the weekday PM peak period was counted between 4:00 PM and 6:00 PM; these periods generally capture the peak times for commuter traffic when the roadway system is typically experiencing peak demand. The actual peak hour within each two-hour count period is determined based on the sum of the four consecutive 15-minute periods with the highest total volume. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest total volume and may vary at other intersections. Intersection turning movement count worksheets are provided in Attachment A.

### **Existing Levels of Service**

The intersection Levels of Service for Existing conditions are shown in Table 2. Existing intersection Level of Service worksheets are provided in Attachment B.

As shown in Table 2, the study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for Existing conditions.

### **Cumulative Trips**

To account for ambient growth on roadways, existing 2022 roadway volumes were increased by a growth rate of three percent (3%) per year over two years for Opening Year (2024) conditions. This equates to a total growth factor of approximately 1.06. The ambient growth rate was conservatively applied to all movements at the study intersection.

To account for trips generated by future development, trips generated by pending or approved other development projects in the City of Perris were added to the study area. For purposes of this analysis, pending and approved projects on Harley Knox Boulevard expected to add traffic to the study intersection were included for analysis. Table 3 shows the other development trip generation and Figure 8 shows the other development location map.

Figure 9 shows the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

### **Opening Year (2024) Without Project Levels of Service**

Opening Year (2024) Without Project volume forecasts were developed by adding ambient growth and other development to the Existing volumes. Figure 10 shows the forecast AM and PM peak hour intersection turning movement volumes for Opening Year (2024) Without Project.

The intersection Levels of Service for Opening Year (2024) Without Project conditions are shown in Table 4. Opening Year (2024) Without Project intersection Level of Service worksheets are provided in Attachment B.

### **Opening Year (2024) With Project Levels of Service**

Opening Year (2024) With Project volume forecasts were developed by adding project generated trips to the Opening Year (2024) Without Project volumes. Figure 11 shows the forecast AM and PM peak hour intersection turning movement volumes for Opening Year (2024) With Project.

The intersection Levels of Service for Opening Year (2024) With Project conditions are shown in Table 5. Opening Year (2024) With Project intersection Level of Service worksheets are provided in Attachment B.

As shown in Table 5, the study intersection is projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2024) With Project conditions. Therefore, the proposed project is forecast to result in no substantial operational deficiencies at the study intersection for Opening Year (2024) With Project conditions and no off-site improvements or corrective measures are recommended.

## SITE ACCESS ANALYSIS

### Queuing Analysis

A queuing analysis was conducted for the eastbound left turn lane at the intersection of Las Palmas Avenue at Harley Knox Boulevard for Opening Year (2024) With Project conditions during the peak hours. The 95th-percentile queue length was determined based on the Highway Capacity Manual back-of-queue methodology as reported in the Level of Service calculation worksheets provided in Attachment B.

Table 6 summarizes results of the queuing analyses for the eastbound left turn lane at the intersection of Las Palmas Avenue at Harley Knox Boulevard to determine if adequate storage length would be provided as proposed. As shown in Table 6, the proposed 150-foot eastbound left turn lane at the intersection of Las Palmas Avenue and Harley Knox Boulevard is forecast to provide sufficient storage length to accommodate the 95th-percentile queue length during the peak hours for Opening Year (2024) With Project conditions.

### Driveway Spacing

Harley Knox Boulevard adjacent to the project site is classified as a Primary Arterial (128 foot right-of-way) in the City of Perris General Plan Circulation Element. The Perris Valley Commerce Center Specific Plan Amendment No. 11 (December 2021) classifies Harley Knox Boulevard adjacent to the project site as an Arterial (128 foot right-of-way). According to Table 4.0-2, Driveway Spacing, of the Specific Plan, the intersection interval for an arterial roadway is 1,320 feet.

Figure 12 shows the intersection spacing on Harley Knox Boulevard between Perris Boulevard and Redlands Avenue. The centerline for the intersection of Perris Boulevard at Harley Knox Boulevard to the centerline for the intersection of Las Palmas Avenue at Harley Knox Boulevard is approximately 1,340 feet. The centerline for the intersection of Las Palmas Avenue at Harley Knox Boulevard to the centerline for the intersection of Redlands Avenue at Harley Knox Boulevard is approximately 1,450 feet. Therefore, the intersection of Las Palmas Avenue at Harley Knox Boulevard conforms with the driveway spacing standards as outlined in the Perris Valley Commerce Center Specific Plan.

### Truck Turning Template

Figure 13 shows the design vehicle turning radius for a California Legal 65-foot truck. Figure 14 shows an outbound truck leaving the project site heading eastbound/westbound on Harley Knox Boulevard. Figure 15 shows an inbound truck heading eastbound/westbound on Harley Knox Boulevard entering the project site.

### Traffic Signal Warrant Analysis

The need for installation of a traffic signal at the currently unsignalized intersection of Las Palmas Avenue at Harley Knox Boulevard was evaluated based on the California Manual on Uniform Traffic Control Devices (CA MUTCD) Section 4C.04, peak hour volume warrant graphs (Warrant 3) based on forecast Opening Year (2024) With Project volumes. Traffic signal warrant analysis worksheets are provided in Attachment C.

The peak hour traffic signal warrant is not satisfied at the intersection of Las Palmas Avenue at Harley Knox Boulevard based on forecast Opening Year (2024) With Project volumes; therefore, installation of traffic signal is not recommended.

Mr. Michael Johnson, Principal  
CRG – LCI HARLEY KNOX, LLC  
March 30, 2022

## CONCLUSIONS

The proposed project is forecast to generate approximately 244 daily vehicle trips, including 25 vehicle trips during the AM peak hour and 24 vehicle trips during the PM peak hour. The proposed project is forecast to generate approximately 348 daily PCE trips, including 35 PCE trips during the AM peak hour and 34 PCE trips during the PM peak hour.

The study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for Existing conditions.

The study intersection is projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2024) With Project conditions. Therefore, the proposed project is forecast to result in no substantial operational deficiencies at the study intersection for Opening Year (2024) With Project conditions and no off-site improvements or corrective measures are recommended

The proposed 150-foot eastbound left turn lane at the intersection of Las Palmas Avenue and Harley Knox Boulevard is forecast to provide sufficient storage length to accommodate the 95th-percentile queue length during the peak hours for Opening Year (2024) With Project conditions.

The intersection of Las Palmas Avenue at Harley Knox Boulevard conforms with the driveway spacing standards as outlined in the Perris Valley Commerce Center Specific Plan.

The peak hour traffic signal warrant is not satisfied at the intersection of Las Palmas Avenue at Harley Knox Boulevard based on forecast Opening Year (2024) With Project volumes; therefore, installation of traffic signal is not recommended.

We appreciate the opportunity to assist you on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 795-3100 x 104.

Sincerely,

GANDDINI GROUP, INC.



Bryan Crawford,  
Senior Transportation Planner



Giancarlo Gandini, TE, PTP  
Principal

**Table 1  
Project Trip Generation**

Land Use: Warehousing
Size: 142,995 TSF

TRIP GENERATION RATES PER TSF <sup>1</sup>								
Vehicle Type	Source <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily Rate
		In	Out	Rate	In	Out	Rate	
All Vehicles	ITE 150	77%	23%	0.170	28%	72%	0.180	1.710
Passenger Cars (72.5%)	ITE 150	0.095	0.028	0.123	0.037	0.094	0.131	1.240
Trucks (27.5%)	SCAQMD	0.024	0.023	0.047	0.026	0.024	0.050	0.470
Truck Mix:	SCAQMD							
2-Axle Trucks (16.7%)		0.006	0.002	0.008	0.002	0.006	0.008	0.079
3-Axle Trucks (20.7%)		0.007	0.002	0.009	0.003	0.007	0.010	0.097
4+ Axle Trucks (62.6%)		0.023	0.007	0.030	0.009	0.022	0.031	0.294

VEHICLE TRIPS GENERATED								
Vehicle Type	AM Peak Hour			PM Peak Hour			Daily	
	In	Out	Total	In	Out	Total		
Passenger Cars	14	5	19	5	13	18	177	
Trucks								
2-Axle Trucks	1	0	1	0	1	1	11	
3-Axle Trucks	1	0	1	0	1	1	14	
4+ Axle Trucks	3	1	4	1	3	4	42	
Subtotal	5	1	6	1	5	6	67	
<b>Total Vehicle Trips Generated</b>	<b>19</b>	<b>6</b>	<b>25</b>	<b>6</b>	<b>18</b>	<b>24</b>	<b>244</b>	

PCE <sup>3</sup> TRIPS GENERATED								
Vehicle Type	PCE Factor <sup>4</sup>	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Passenger Cars	1.0	14	5	19	5	13	18	177
Trucks								
2-Axle Trucks	1.5	2	0	2	0	2	2	17
3-Axle Trucks	2.0	2	0	2	0	2	2	28
4+ Axle Trucks	3.0	9	3	12	3	9	12	126
Subtotal		13	3	16	3	13	16	171
<b>Total PCE Trips Generated</b>		<b>27</b>	<b>8</b>	<b>35</b>	<b>8</b>	<b>26</b>	<b>34</b>	<b>348</b>

Notes:

- (1) TSF = Thousand Square Feet
- (2) ITE = Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021); ### = ITE Land Use Code.  
SCAQMD = South Coast Air Quality Management District recommendations for non-cold storage high-cube warehouse.
- (3) PCE = Passenger Car Equivalent
- (4) Source: San Bernardino County Congestion Management Program (2016), Appendix B.



**Table 2**  
**Existing Intersection Levels of Service**

Study Intersection	Traffic Control <sup>1</sup>	AM Peak Hour		PM Peak Hour	
		Delay <sup>2</sup>	LOS <sup>3</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>
1. Las Palmas Avenue at Harley Knox Boulevard	CSS	10.1	B	9.5	A

Notes:

- (1) CSS = Cross Street Stop
- (2) Delay is shown in seconds/vehicle. For intersections with cross street stop control, LOS is based on average delay of the worst approach.
- (3) LOS = Level of Service

**Table 3  
Other Development Trip Generation**

Map ID	Project Name	Land Use	Quantity	Units <sup>1</sup>	Trips Generated <sup>2</sup>						
					AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
1	March Plaza <sup>3</sup>	Commercial	47,253	TSF	112	103	215	156	164	320	2,687
2	Perris at Harley Knox Beyond Food Mart <sup>4</sup>	Gas Station	16,000	VFP	121	121	242	130	130	260	2,605
3	First Harley Knox Logistics Center	Warehousing - Passenger Cars	185,058	TSF	21	7	28	8	20	28	205
		Warehousing - Trucks			10	3	13	3	13	16	285
		Subtotal			31	10	41	11	33	44	490
Total					264	234	498	297	327	624	5,782

Notes:

- (1) TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions
- (2) ITE = Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021); ### = ITE Land Use Code.  
SCAQMD = South Coast Air Quality Management District recommendations for non-cold storage high-cube warehouse.
- (3) Source: March Plaza Traffic Impact Analysis (Kunzman Associates, Inc., February 17, 2017)

**Table 4**  
**Opening Year (2024) Without Project Plus Cumulative Intersection Levels of Service**

Study Intersection	Traffic Control <sup>1</sup>	AM Peak Hour		PM Peak Hour	
		Delay <sup>2</sup>	LOS <sup>3</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>
1. Las Palmas Avenue at Harley Knox Boulevard	CSS	10.3	B	9.6	A

Notes:

- (1) CSS = Cross Street Stop
- (2) Delay is shown in seconds/vehicle. For intersections with cross street stop control, LOS is based on average delay of the worst approach.
- (3) LOS = Level of Service

**Table 5**  
**Opening Year (2024) With Project Plus Cumulative Intersection Levels of Service**

Study Intersection	Traffic Control <sup>1</sup>	AM Peak Hour		PM Peak Hour	
		Delay <sup>2</sup>	LOS <sup>3</sup>	Delay <sup>2</sup>	LOS <sup>3</sup>
1. Las Palmas Avenue at Harley Knox Boulevard	CSS	10.3	B	10.8	B

Notes:

- (1) CSS = Cross Street Stop
- (2) Delay is shown in seconds/vehicle. For intersections with cross street stop control, LOS is based on average delay of the worst approach.
- (3) LOS = Level of Service

**Table 6**  
**Queuing Analysis - Opening Year (2024) With Project**

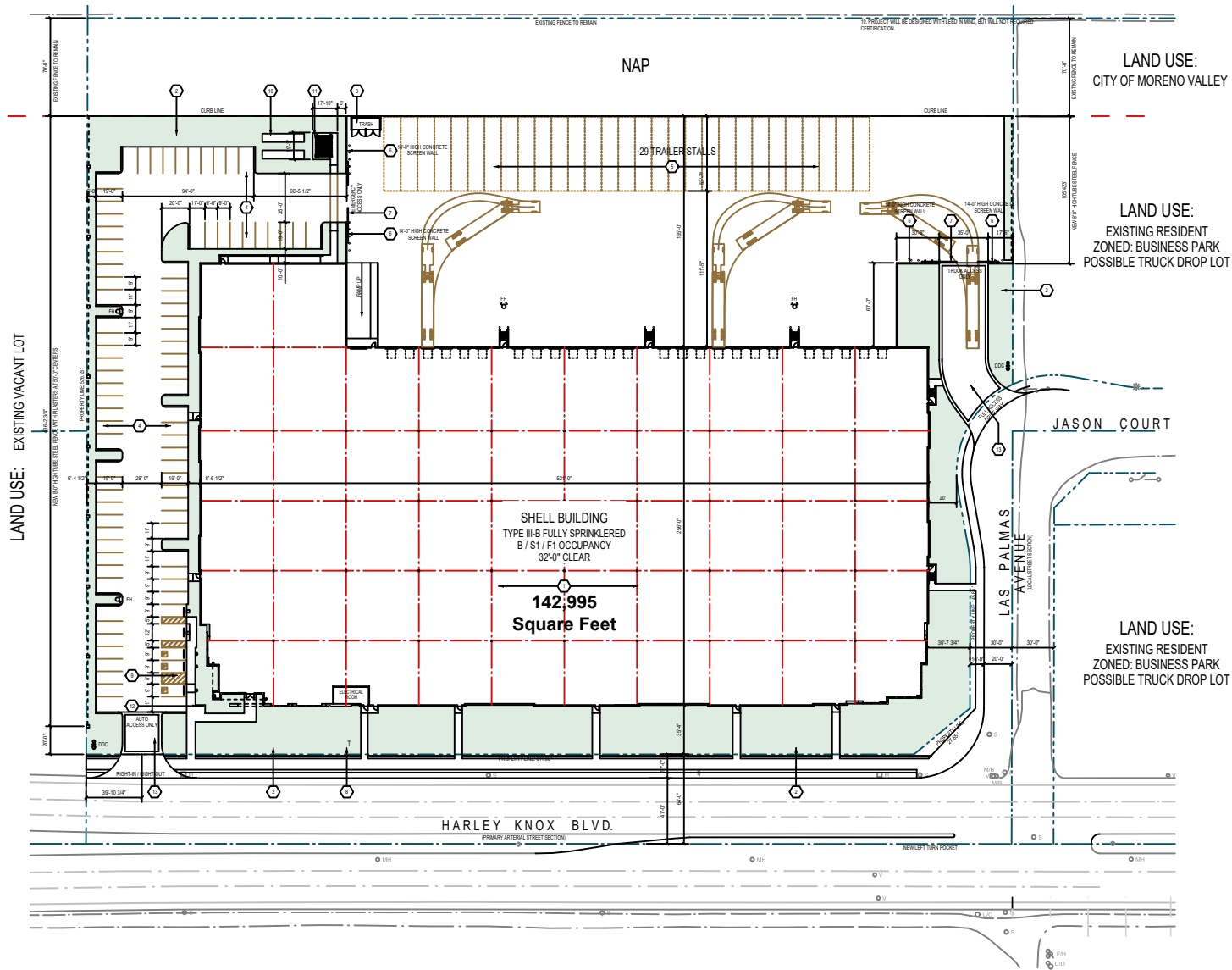
Study Intersection	Turning Movement	95th-Percentile Queue Length <sup>1</sup> (feet per lane)		Available Storage Length <sup>2</sup>	Adequate Storage
		AM Peak Hour	PM Peak Hour		
Las Palmas Avenue at Harley Knox Boulevard	Eastbound Left Turn Lane	<25 Feet <sup>3</sup>	<25 Feet <sup>3</sup>	150 Feet	Yes

Notes:

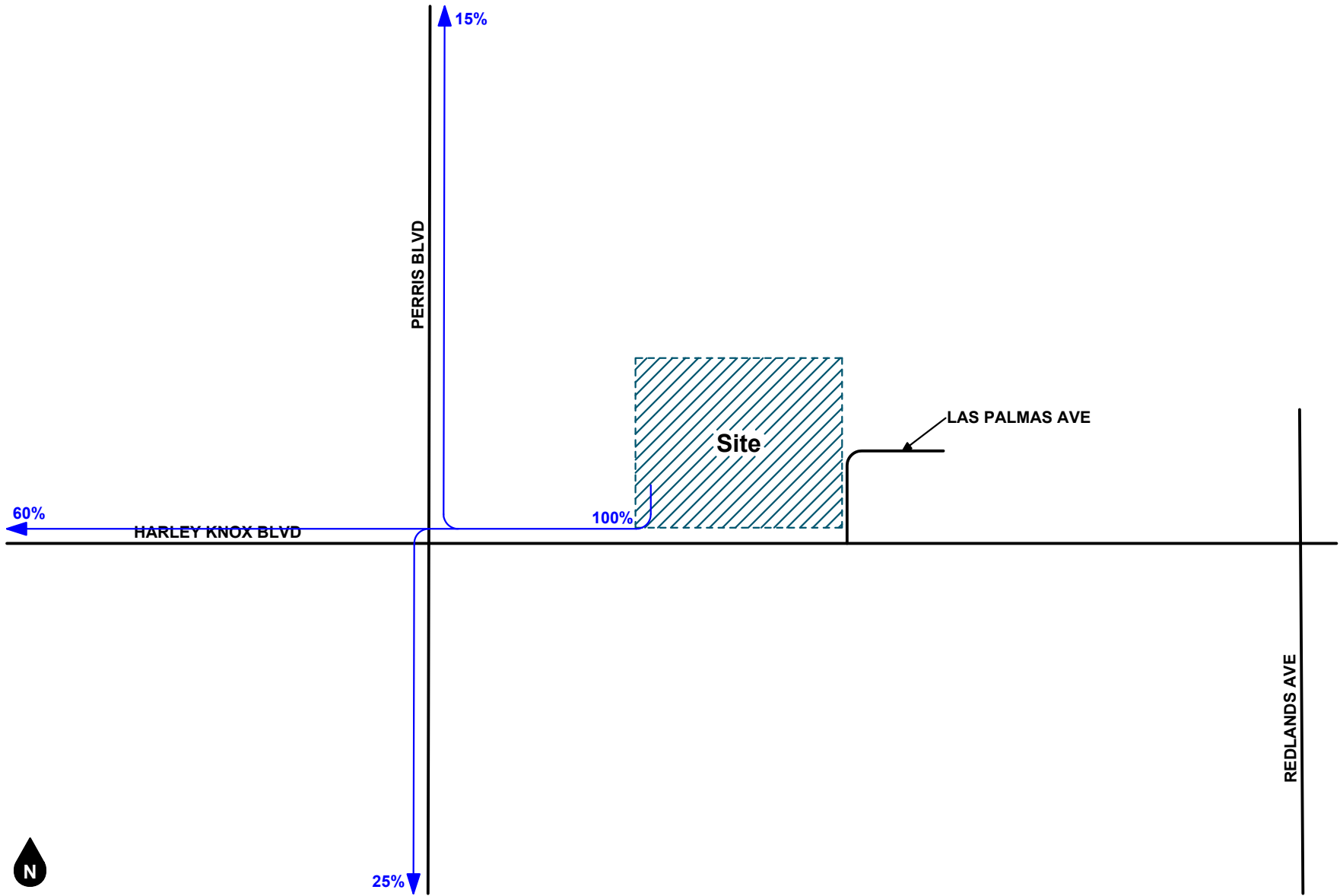
1. Queuing analysis based on Highway Capacity Manual 95th-percentile back-of-queue as reported in Level of Service calculation; see Attachment B.
2. Available storage lengths based on planned left turn lane as shown on the project site plan, which will be a minimum of 150 feet.
3. Typically 25 feet of storage is required for one vehicle to queue. 95th-Percentile queue length less than 25 feet indicates nominal queuing.



**Figure 1**  
**Project Location Map**



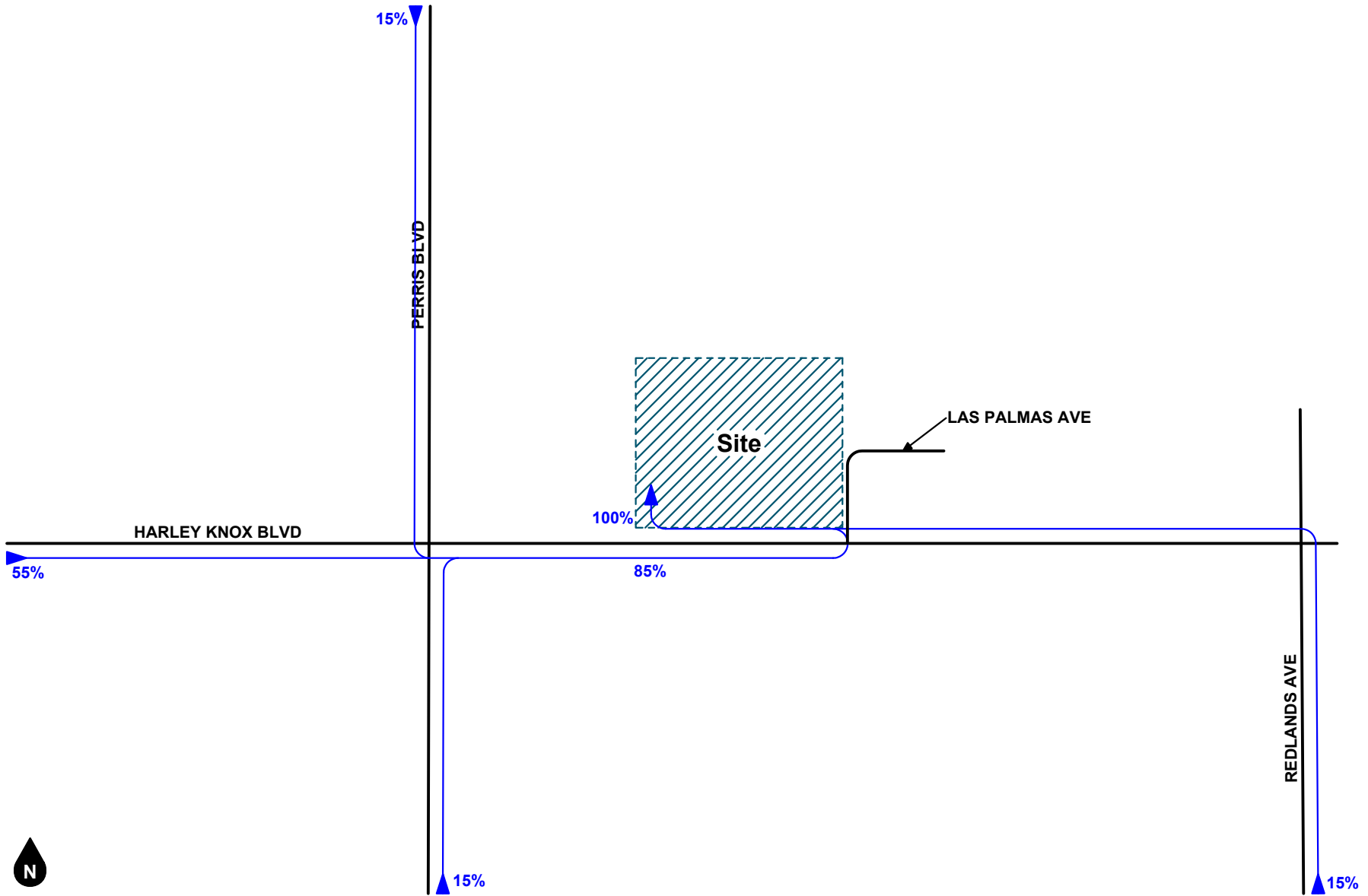
**Figure 2**  
**Site Plan**



Legend  
 ← 10% Percent From Project

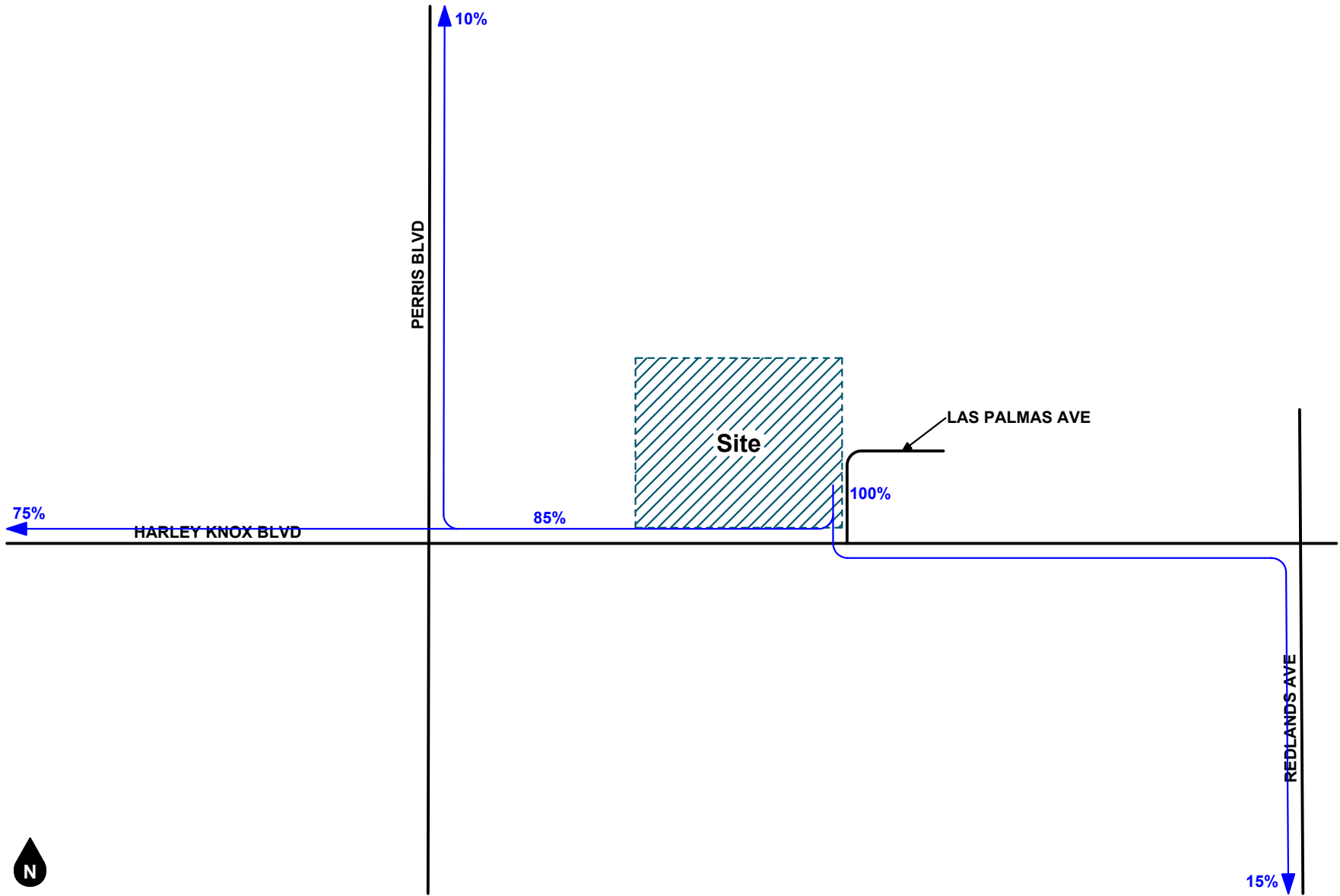
**Figure 3**  
**Project Outbound Distribution - Cars**







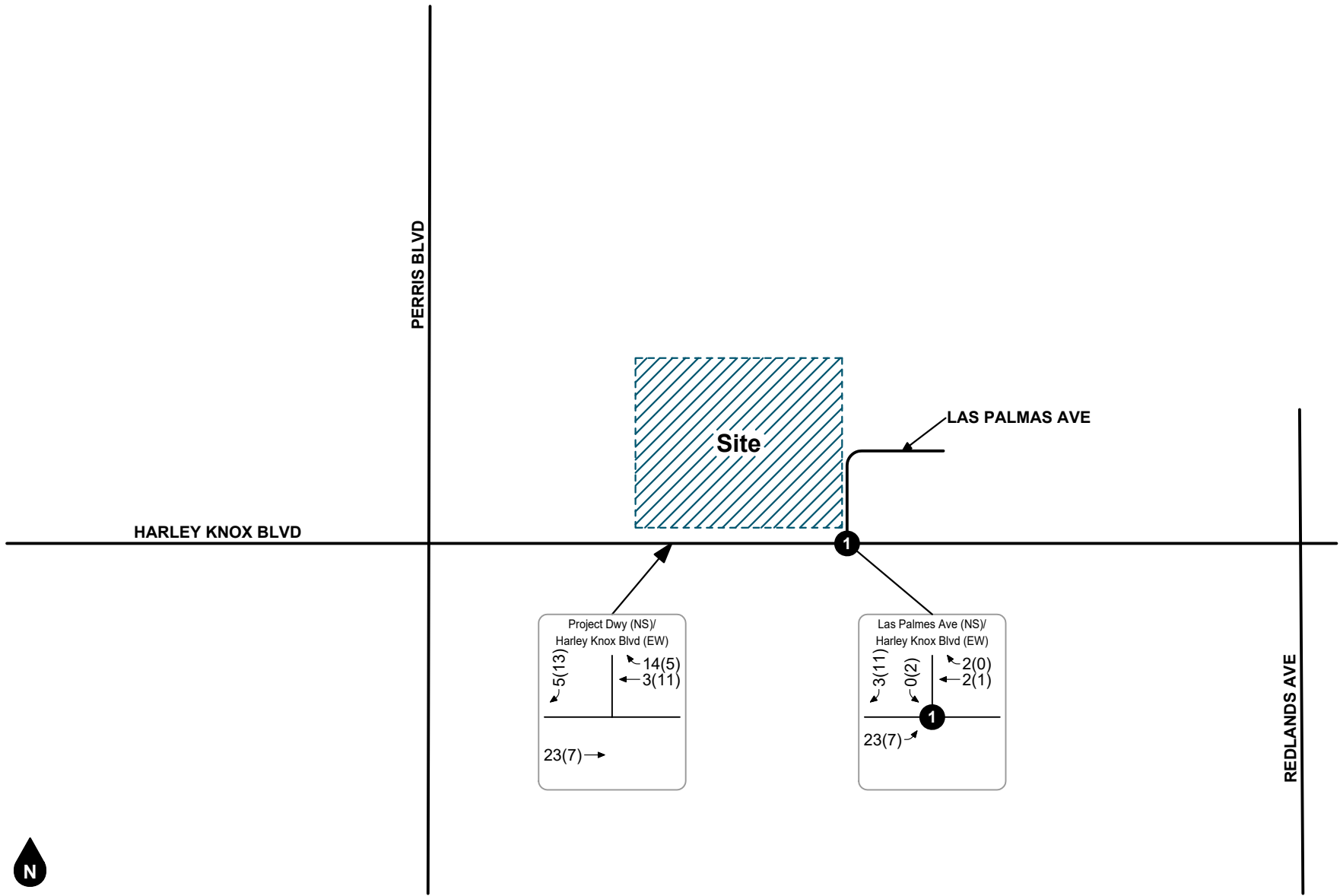
Legend  
 ← 10% Percent To Project

**Figure 4**  
**Project Inbound Trip Distribution - Cars**



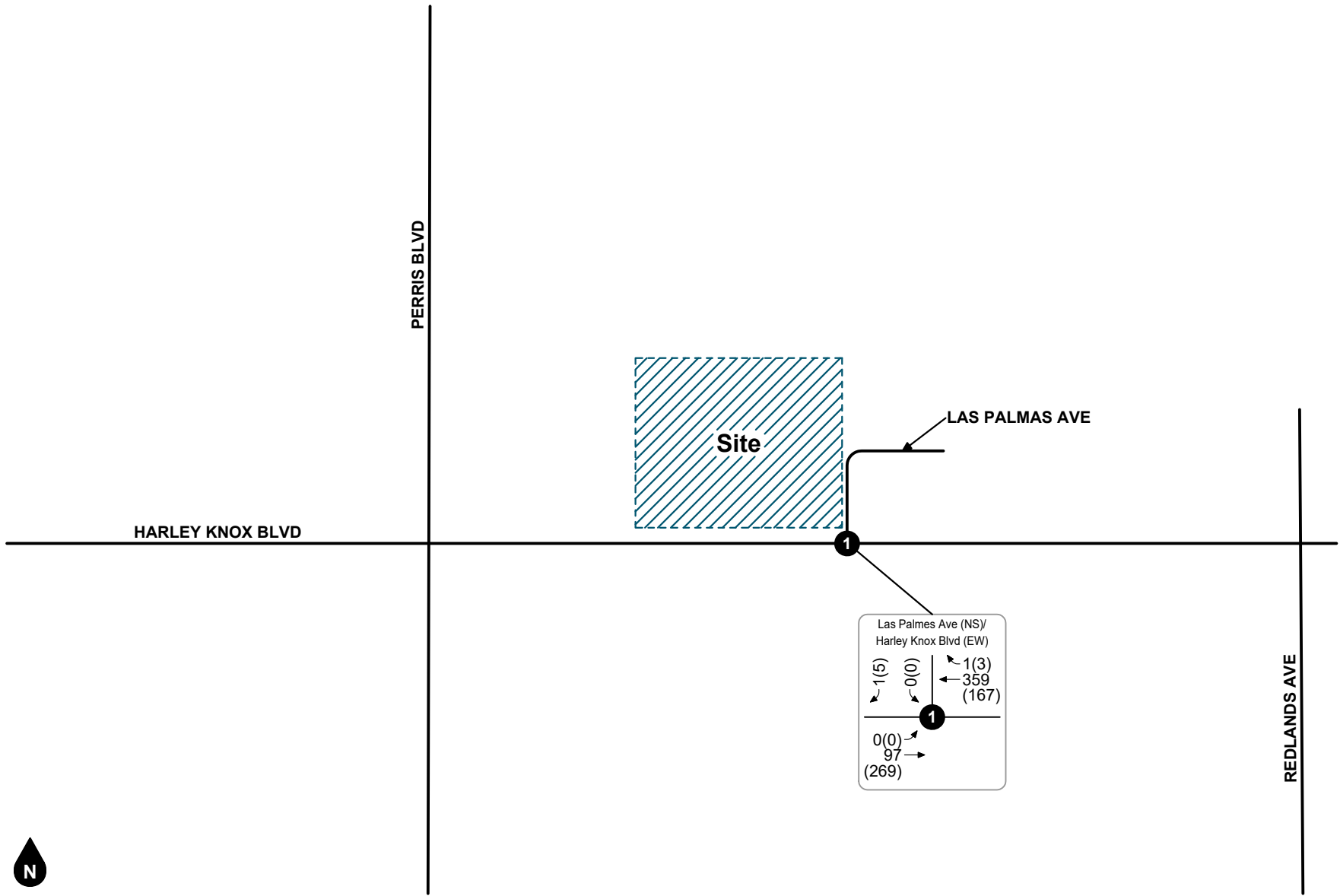

  
 Legend  
 10% Percent To/From Project

**Figure 5**  
**Project Trip Distribution - Trucks**



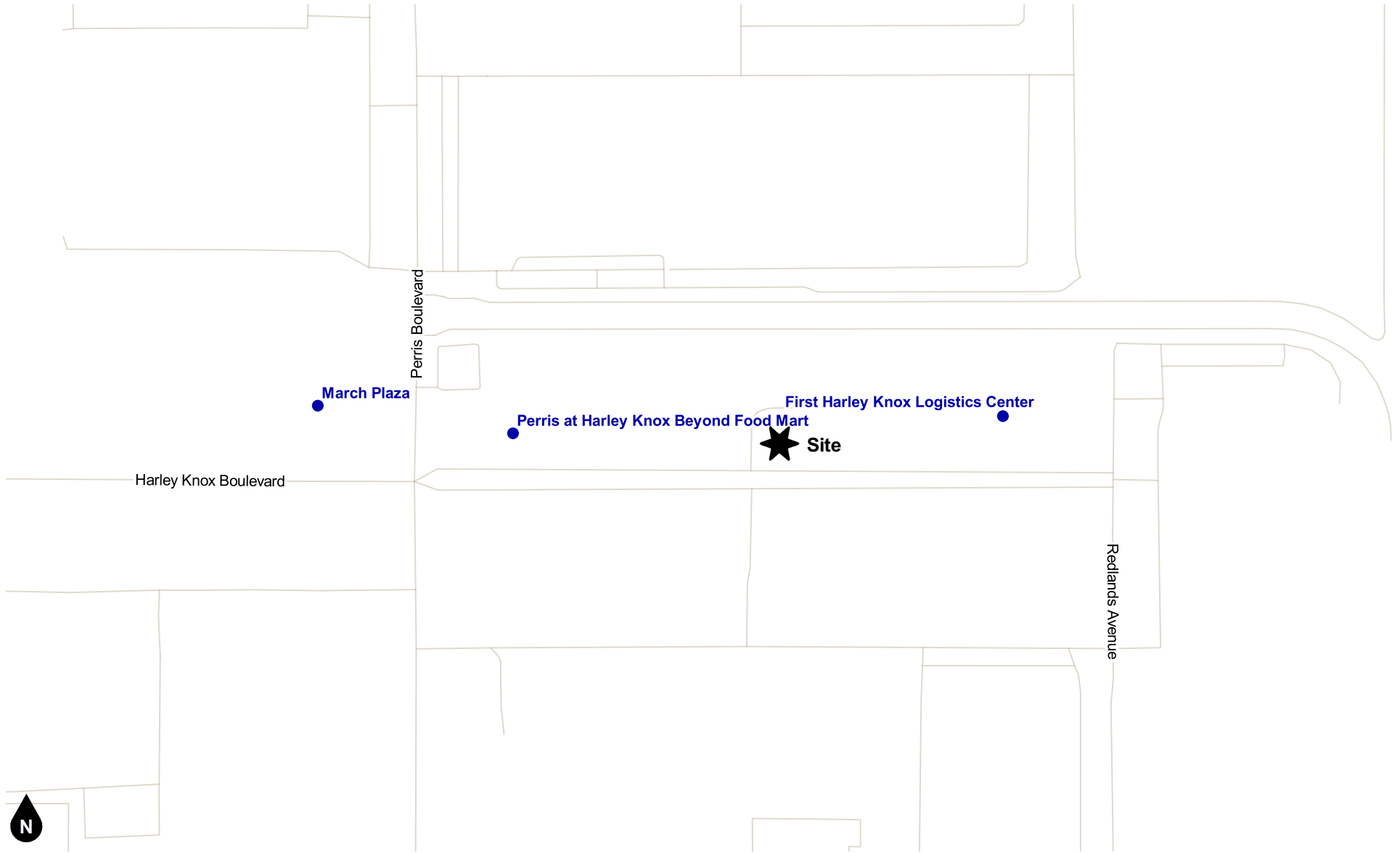
Legend  
 X(X) AM (PM) Project Turning Movement Volumes

**Figure 6**  
**Project Trip Assignment**



Legend  
 X(X) AM (PM) Project Turning Movement Volumes

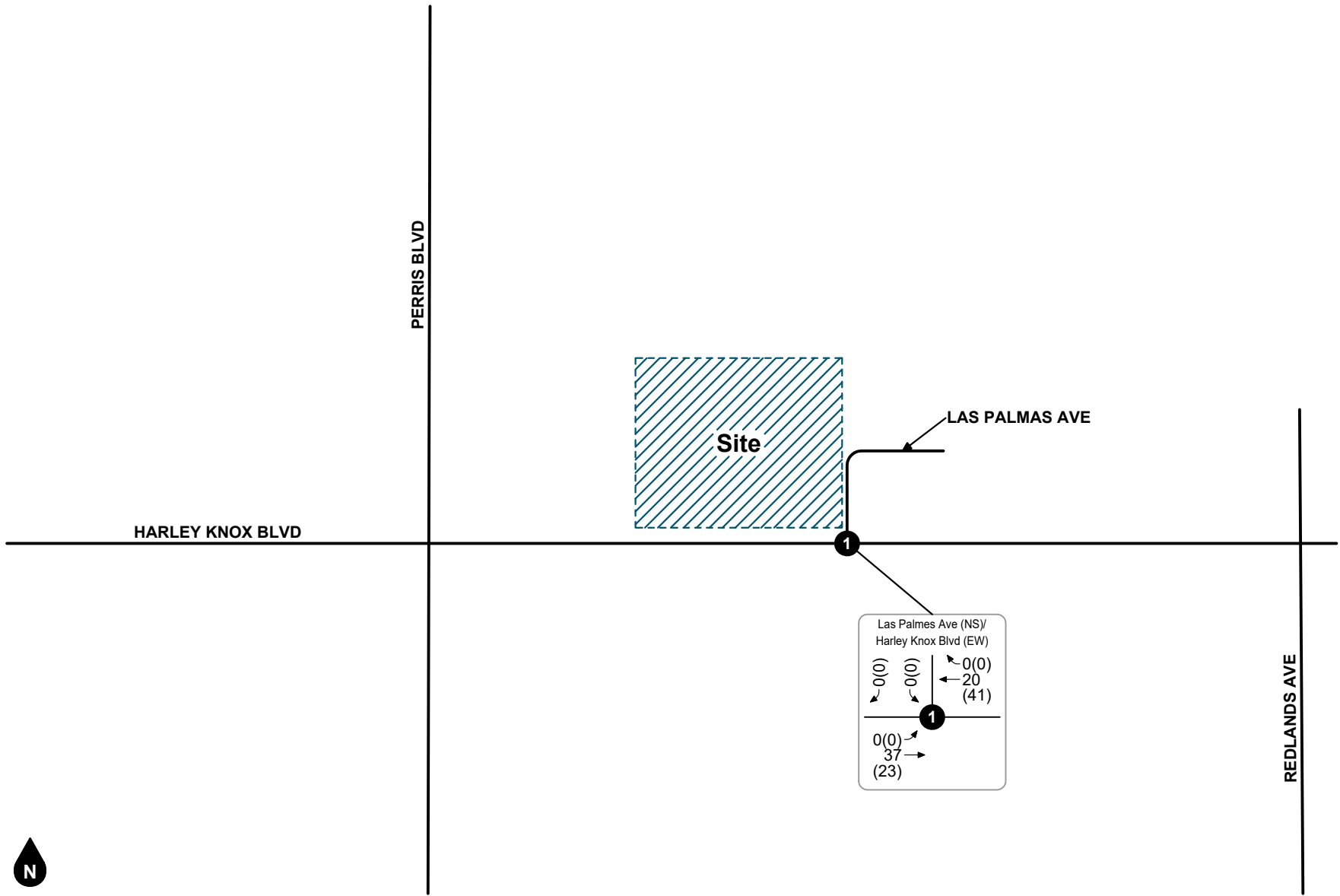
**Figure 7**  
**Existing AM/PM Peak Hour Intersection Turning Movement Volumes**



**Legend**

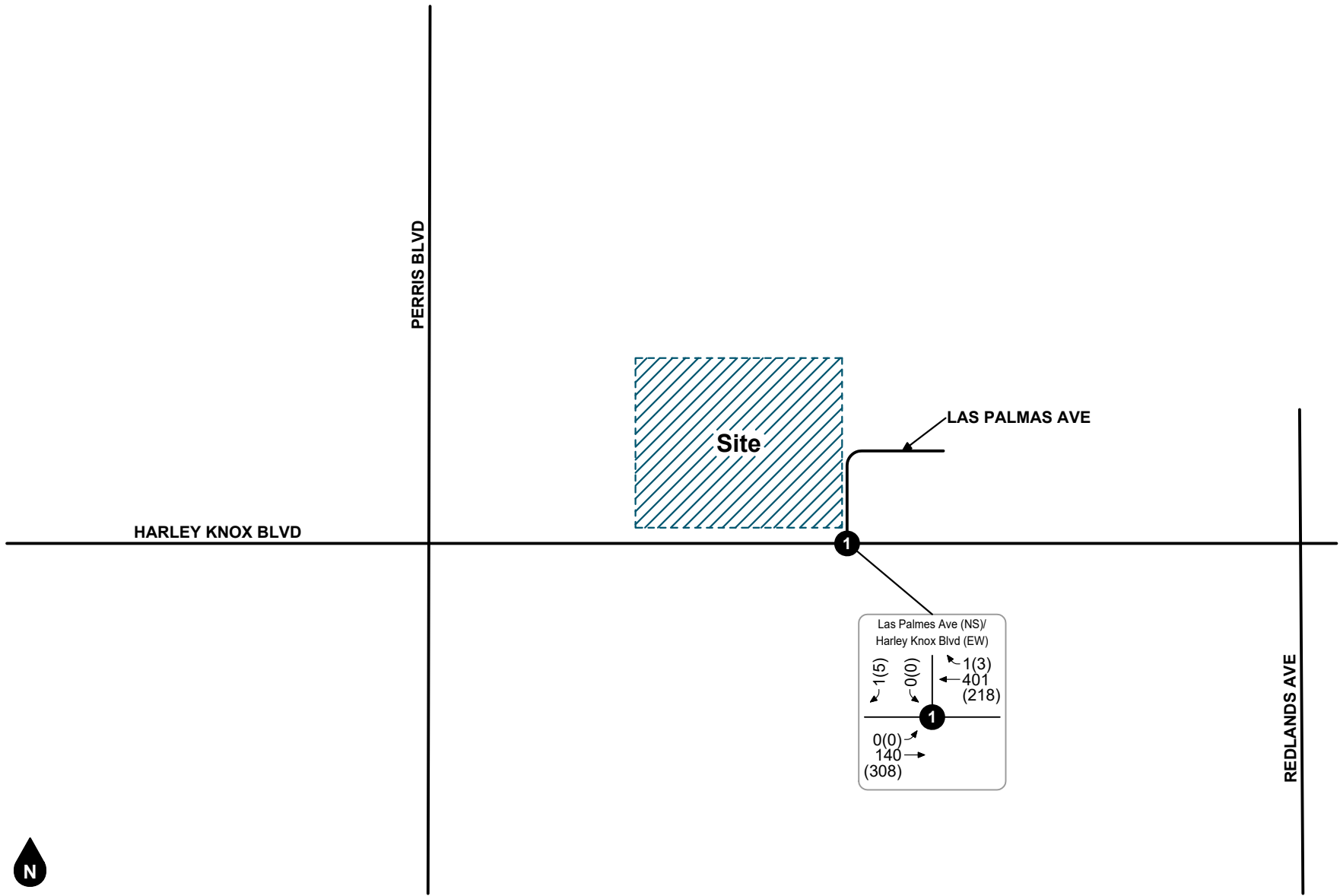
- Other Development

**Figure 8**  
**Other Development Location Map**



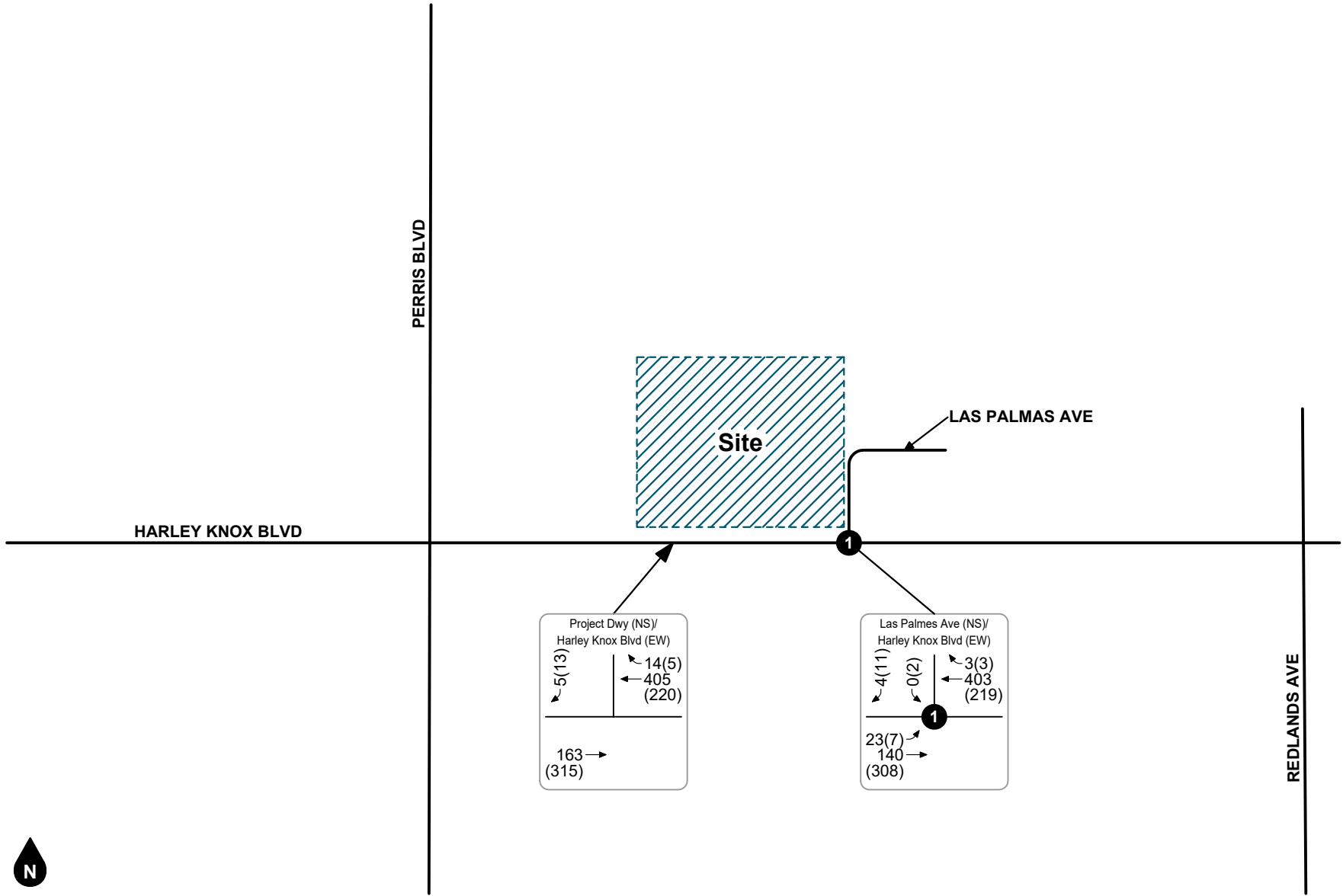
Legend  
X(X) AM (PM) Project Turning Movement Volumes

**Figure 9**  
**Other Development**  
**AM/PM Peak Hour Intersection Turning Movement Volumes**



Legend  
 X(X) AM (PM) Project Turning Movement Volumes

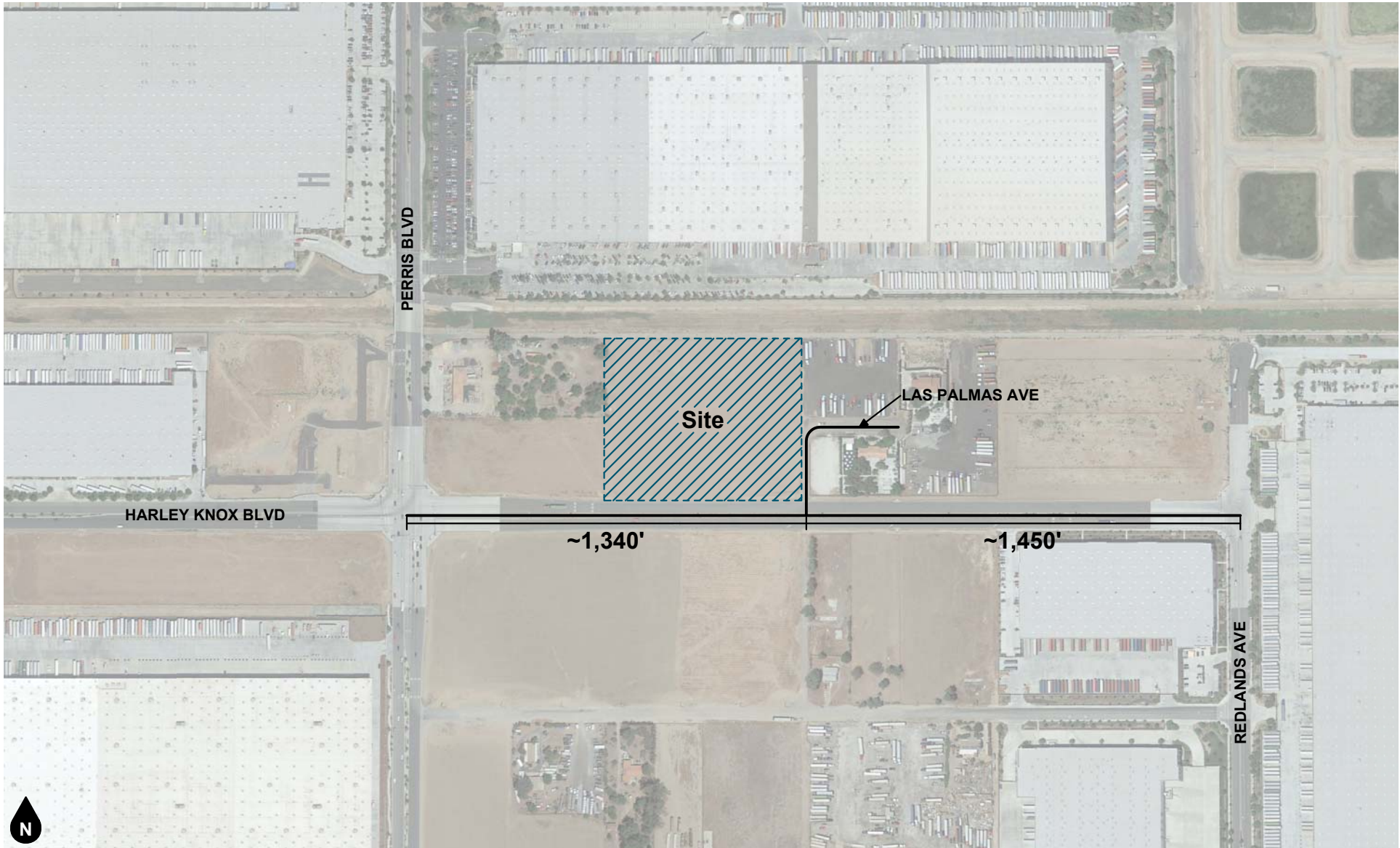
**Figure 10**  
**Opening Year (2024) Without Project**  
**AM/PM Peak Hour Intersection Turning Movement Volumes**



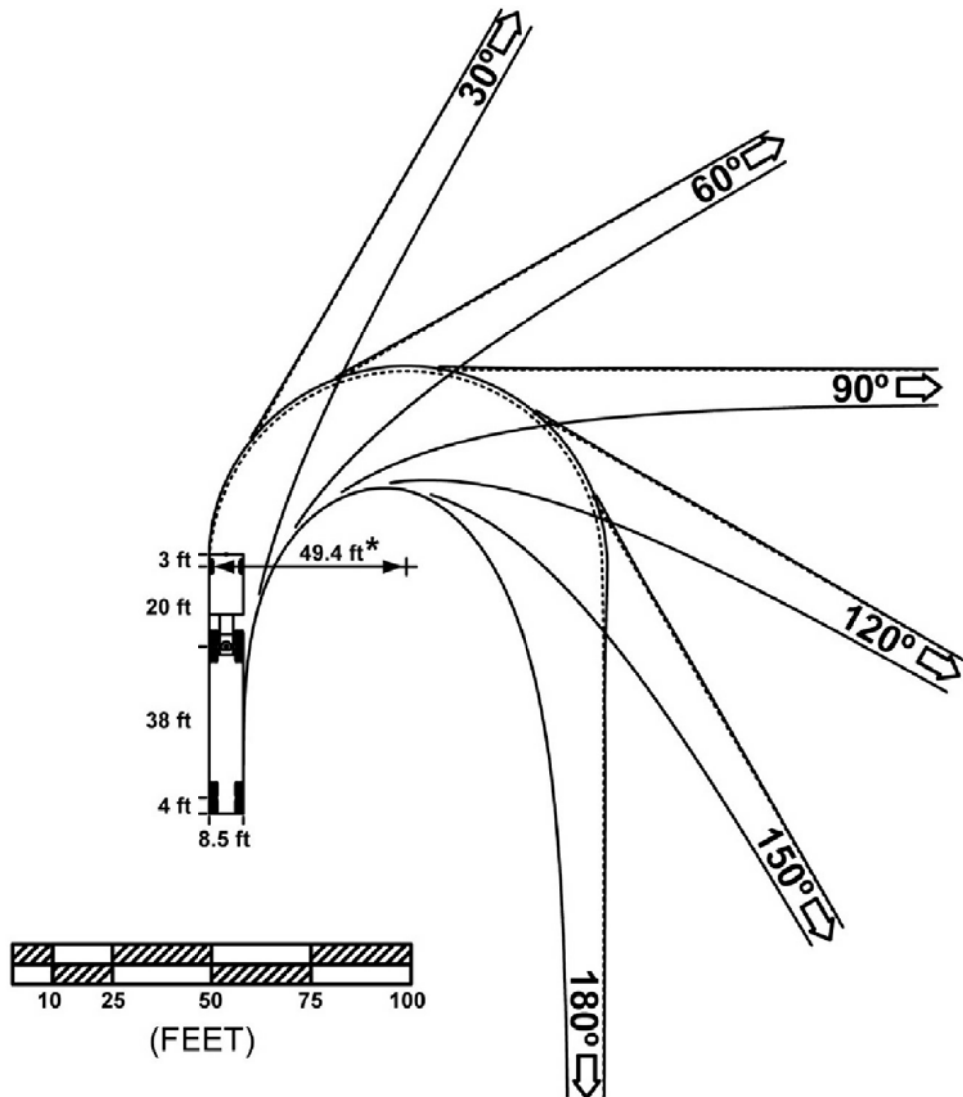
Legend  
 X(X) AM (PM) Project Turning Movement Volumes

**Figure 11**  
**Opening Year (2024) With Project**  
**AM/PM Peak Hour Intersection Turning Movement Volumes**

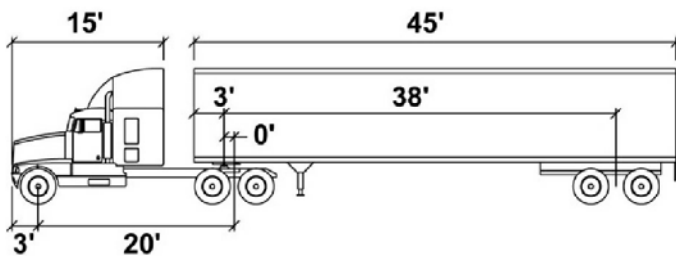




**Figure 12**  
**Intersection Spacing**



\* Radius to outside wheel at beginning of curve.



### LEGEND

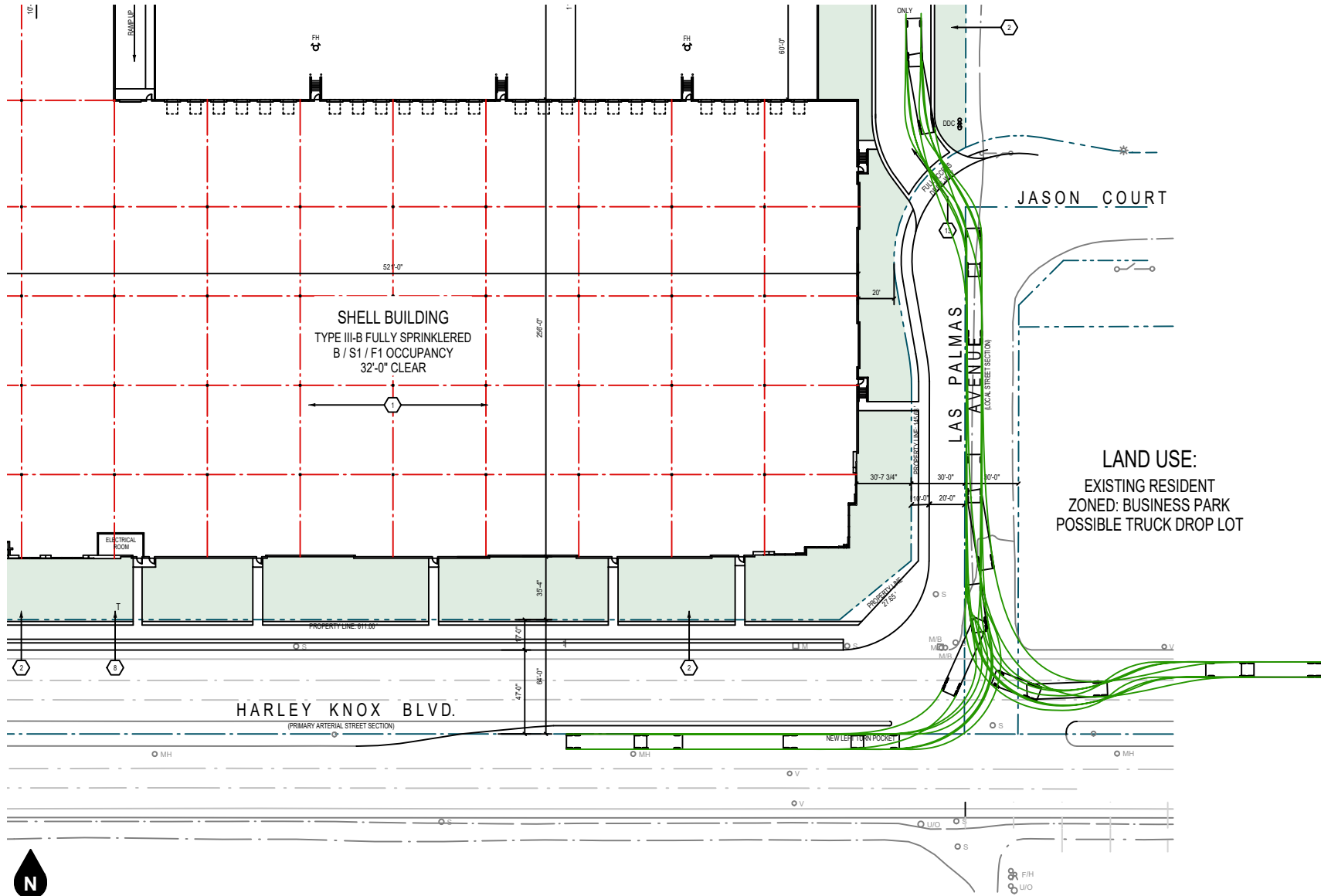
	Swept Width (Body)
	Tracking Width (Tires)

### CA LEGAL - 65 FT

Tractor Width	: 8.5'	Lock to Lock Time	: 6 seconds
Trailer Width	: 8.5'	Steering Lock Angle	: 26.3 degrees
Tractor Track	: 8.5'	Articulating Angle	: 70 degrees
Trailer Track	: 8.5'		

**Figure 13**  
**Design Vehicle Turning Radius**





**Legend**  
 — Swept Path (i.e., Overhang)

**Figure 15**  
**Inbound Truck Turning Template**

**ATTACHMENT A**  
**TRAFFIC COUNTS**

## INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

**DATE:**  
Wed, Jan 19, 22

**LOCATION:** Perris  
NORTH & SOUTH: Las Palmas  
EAST & WEST: Harley Knox

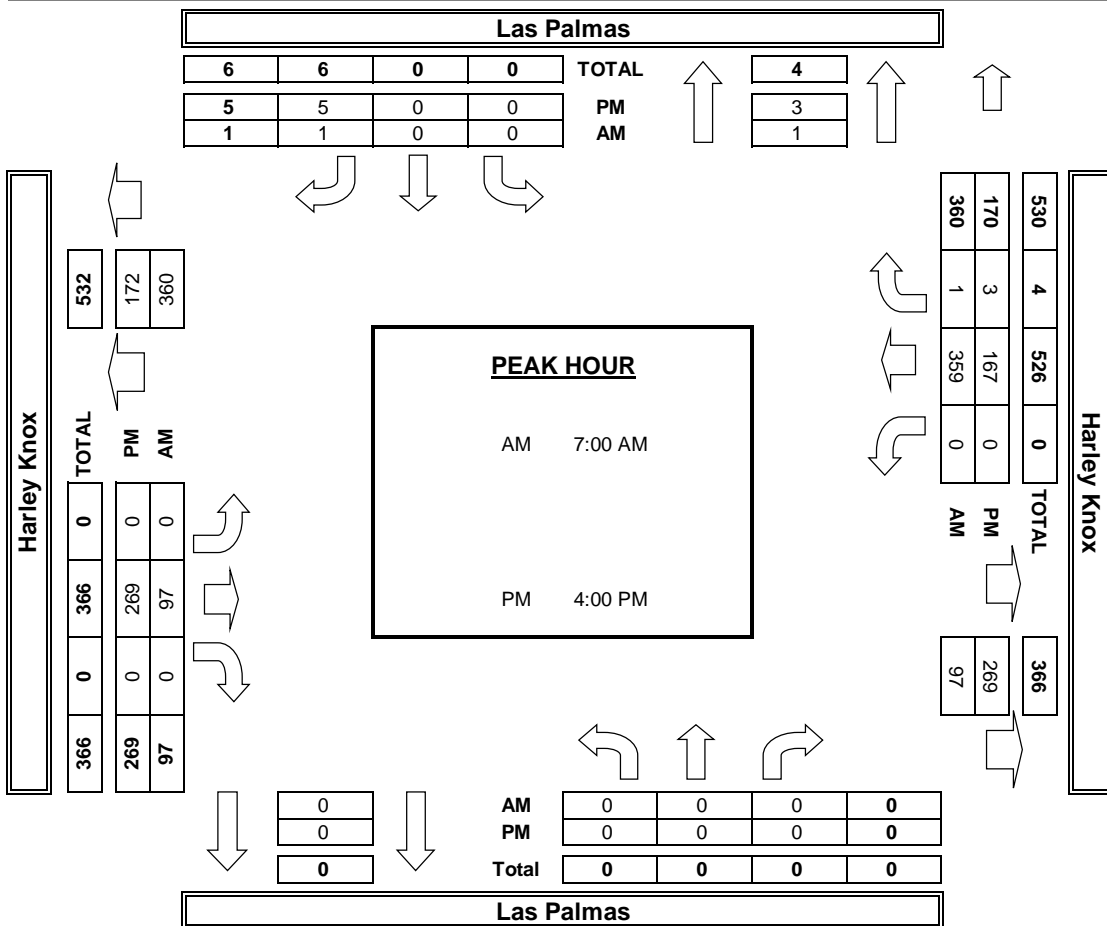
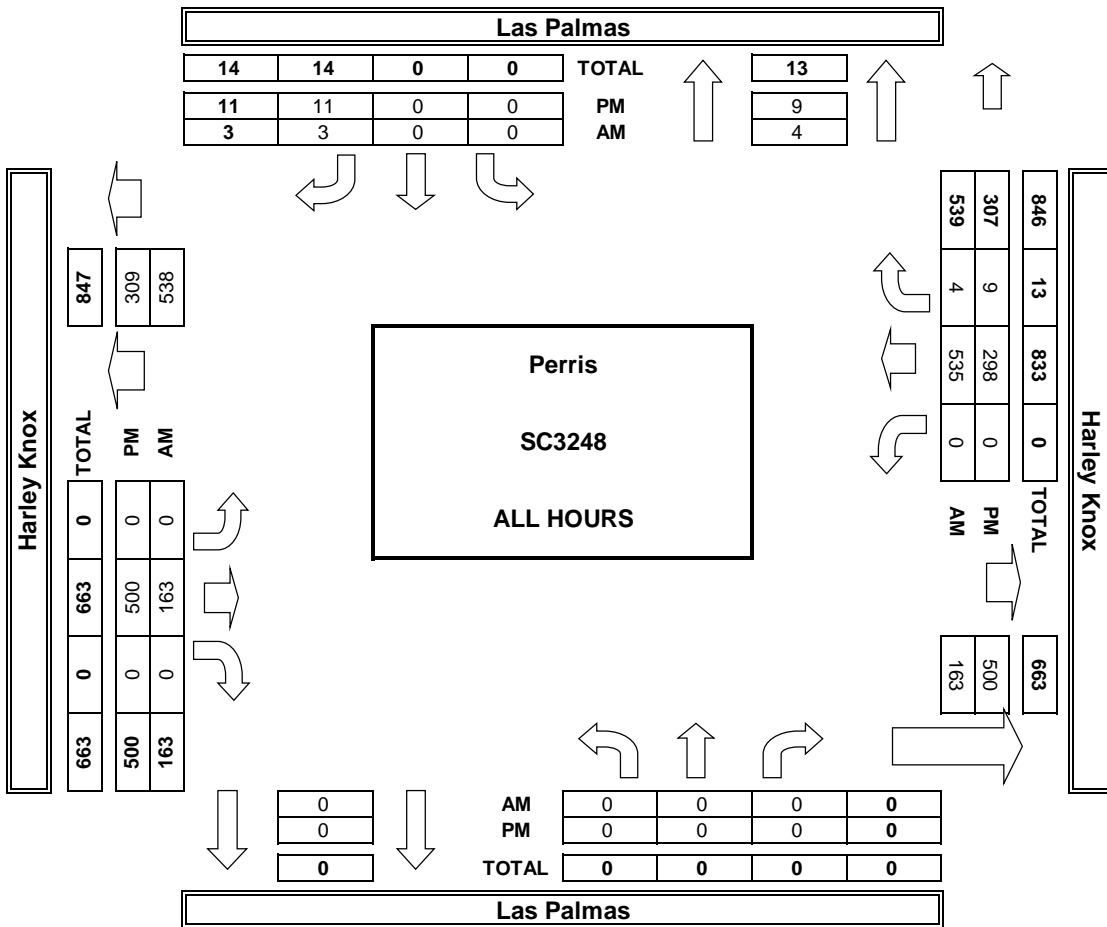
**PROJECT #:** SC3248  
**LOCATION #:** 1  
**CONTROL:** STOP S

NOTES:	AM		▲	
	PM		N	
	MD	◀ W	S	E ▶
	OTHER		▼	
	OTHER			

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Las Palmas			Las Palmas			Harley Knox			Harley Knox			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	X	X	X	X	X	0	X	3	X	X	3	0	

<b>AM</b>	7:00 AM	0	0	0	0	0	1	0	21	0	0	82	0	104
	7:15 AM	0	0	0	0	0	0	0	23	0	0	100	0	123
	7:30 AM	0	0	0	0	0	0	0	27	0	0	98	0	125
	7:45 AM	0	0	0	0	0	0	0	26	0	0	79	1	106
	8:00 AM	0	0	0	0	0	0	0	14	0	0	58	1	73
	8:15 AM	0	0	0	0	0	1	0	23	0	0	37	0	61
	8:30 AM	0	0	0	0	0	0	0	14	0	0	49	1	64
	8:45 AM	0	0	0	0	0	1	0	15	0	0	32	1	49
	VOLUMES	0	0	0	0	0	3	0	163	0	0	535	4	705
	APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	99%	1%	
APP/DEPART	0	/	4	3	/	0	163	/	163	539	/	538	0	
BEGIN PEAK HR	7:00 AM													
VOLUMES	0	0	0	0	0	1	0	97	0	0	359	1	458	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%	0%		
PEAK HR FACTOR	0.000			0.250			0.898			0.900			0.916	
APP/DEPART	0	/	1	1	/	0	97	/	97	360	/	360	0	
<b>PM</b>	4:00 PM	0	0	0	0	0	1	0	69	0	0	46	2	118
	4:15 PM	0	0	0	0	0	1	0	59	0	0	48	1	109
	4:30 PM	0	0	0	0	0	3	0	86	0	0	39	0	128
	4:45 PM	0	0	0	0	0	0	0	55	0	0	34	0	89
	5:00 PM	0	0	0	0	0	1	0	63	0	0	33	2	99
	5:15 PM	0	0	0	0	0	1	0	56	0	0	31	2	90
	5:30 PM	0	0	0	0	0	4	0	68	0	0	38	1	111
	5:45 PM	0	0	0	0	0	0	0	44	0	0	29	1	74
	VOLUMES	0	0	0	0	0	11	0	500	0	0	298	9	818
	APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	97%	3%	
APP/DEPART	0	/	9	11	/	0	500	/	500	307	/	309	0	
BEGIN PEAK HR	4:00 PM													
VOLUMES	0	0	0	0	0	5	0	269	0	0	167	3	444	
APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	98%	2%		
PEAK HR FACTOR	0.000			0.417			0.782			0.867			0.867	
APP/DEPART	0	/	3	5	/	0	269	/	269	170	/	172	0	

**AimTD LLC**  
TURNING MOVEMENT COUNTS



**ATTACHMENT B**  
**LEVEL OF SERVICE WORKSHEETS**



Harley Knox Industrial Project

Vistro File: C:\...\AME.vistro  
Report File: C:\...\AME.pdf

Scenario 1 Existing AM Peak Hour  
1/31/2022

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Las Palmas (NS) at Harley Knox Blvd (EW)	Two-way stop	HCM 6th Edition	SB Right	0.001	10.1	B

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: Las Palmas (NS) at Harley Knox Blvd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.001

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	1	0	97	359	1
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	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
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	1	0	97	359	1
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	26	98	0
Total Analysis Volume [veh/h]	0	1	0	106	392	1
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
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	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.89	10.09	9.57	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.11	0.11	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.09		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	B					

Harley Knox Industrial Project

Vistro File: C:\...\PME.vistro  
Report File: C:\...\PME.pdf

Scenario 1 Existing PM Peak Hour  
1/31/2022

**Intersection Analysis Summary**




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Las Palmas (NS) at Harley Knox Blvd (EW)	Two-way stop	HCM 6th Edition	SB Right	0.006	9.5	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: Las Palmas (NS) at Harley Knox Blvd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.006

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	5	0	269	167	3
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	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
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	5	0	269	167	3
Peak Hour Factor	0.8670	0.8670	0.8670	0.8670	0.8670	0.8670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	78	48	1
Total Analysis Volume [veh/h]	0	6	0	310	193	3
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
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	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.17	9.46	8.73	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.46	0.46	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.46		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.11					
Intersection LOS	A					

## Harley Knox Industrial Project

Vistro File: C:\...\AME.vistro

Scenario 2 Opening Year (2024) Without Project AM Peak  
Hour

Report File: C:\...\AMOYWO.pdf

3/29/2022

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Las Palmas (NS) at Harley Knox Blvd (EW)	Two-way stop	HCM 6th Edition	SB Right	0.001	10.3	B

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: Las Palmas (NS) at Harley Knox Blvd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.001

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	1	0	97	359	1
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	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	37	20	0
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	1	0	140	401	1
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	38	109	0
Total Analysis Volume [veh/h]	0	1	0	153	438	1
Pedestrian Volume [ped/h]	0		0		0	



**Intersection Settings**

Priority Scheme	Stop	Free	Free
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	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.28	10.25	9.78	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.11	0.11	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.25		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	B					

Harley Knox Industrial Project

Vistro File: C:\...\PME.vistro

Scenario 2 Opening Year (2024) Without Project PM Peak Hour

Report File: C:\...\PMOYWO.pdf

3/29/2022

**Intersection Analysis Summary**




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Las Palmas (NS) at Harley Knox Blvd (EW)	Two-way stop	HCM 6th Edition	SB Right	0.006	9.6	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: Las Palmas (NS) at Harley Knox Blvd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.006

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	5	0	269	167	3
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	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	23	41	0
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	5	0	308	218	3
Peak Hour Factor	0.8670	0.8670	0.8670	0.8670	0.8670	0.8670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	0	89	63	1
Total Analysis Volume [veh/h]	0	6	0	355	251	3
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
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	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.56	9.63	8.94	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.48	0.48	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.63		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.09					
Intersection LOS	A					

## Harley Knox Industrial Project

Vistro File: C:\...\AME.vistro

Scenario 3 Opening Year (2024) With Project AM Peak Hour

Report File: C:\...\AMOYW.pdf

3/29/2022

**Intersection Analysis Summary**




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Las Palmas (NS) at Harley Knox Blvd (EW)	Two-way stop	HCM 6th Edition	SB Right	0.006	10.3	B

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: Las Palmas (NS) at Harley Knox Blvd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.006

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	1	0	97	359	1
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	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	23	37	22	2
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	4	23	140	403	3
Peak Hour Factor	0.9160	0.9160	0.9160	0.9160	0.9160	0.9160
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	6	38	110	1
Total Analysis Volume [veh/h]	0	4	25	153	440	3
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
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	0.01	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.87	10.29	9.96	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.09	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.44	0.44	2.37	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.29		1.40		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.47					
Intersection LOS	B					

## Harley Knox Industrial Project

Vistro File: C:\...\PME.vistro

Scenario 3 Opening Year (2024) With Project PM Peak Hour

Report File: C:\...\PMOYW.pdf

3/29/2022

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Las Palmas (NS) at Harley Knox Blvd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.003	10.8	B

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: Las Palmas (NS) at Harley Knox Blvd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.003

**Intersection Setup**

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↔		↔ ↑ ↑		↑ ↑↔	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

**Volumes**

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	5	0	269	167	3
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	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	11	7	23	42	0
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]	2	16	7	308	219	3
Peak Hour Factor	0.8670	0.8670	0.8670	0.8670	0.8670	0.8670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	5	2	89	63	1
Total Analysis Volume [veh/h]	2	18	8	355	253	3
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
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	0.02	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.78	9.72	8.98	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.81	1.81	0.58	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.83		0.20		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.43					
Intersection LOS	B					

**ATTACHMENT C**  
**TRAFFIC SIGNAL WARRANT WORKSHEETS**

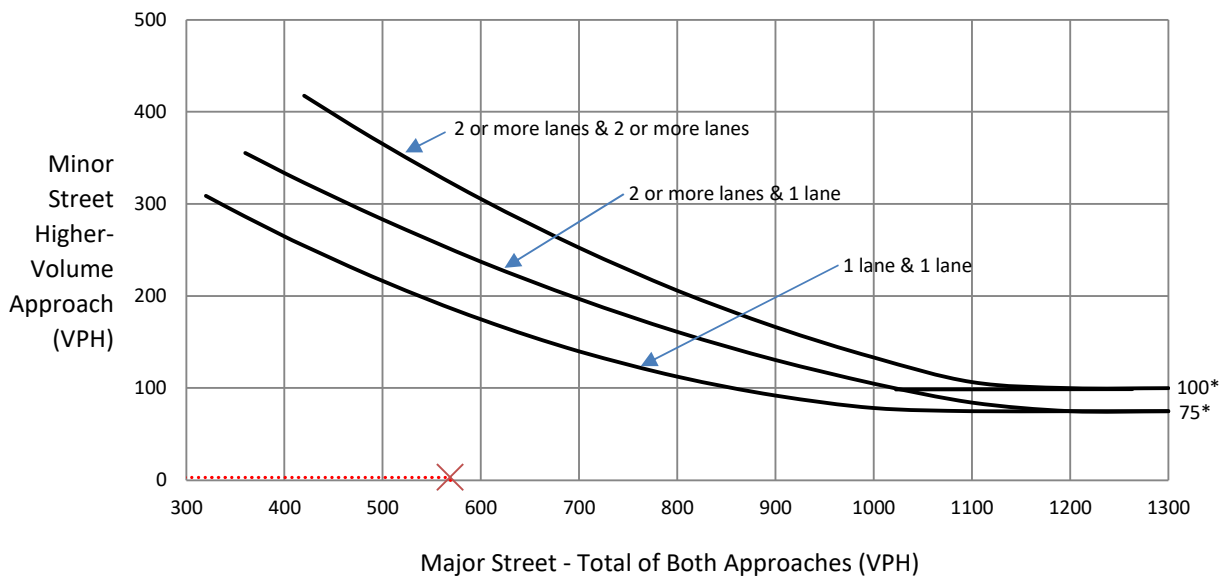
**Figure C-1**

**Las Palmas at Harley Knox Blvd - #1  
Opening Year With Project  
AM Peak Hour**

Major Street: Harley Knox Blvd Volume: 569  
Minor Street: Las Palmas Volume: 3

**Warrant 3, Peak Hour Vehicular Volume (70% Factor)**

(Community less than 10,000 population or above 40 mph on the major street)



**Traffic Signal Warrant Is NOT Satisfied**

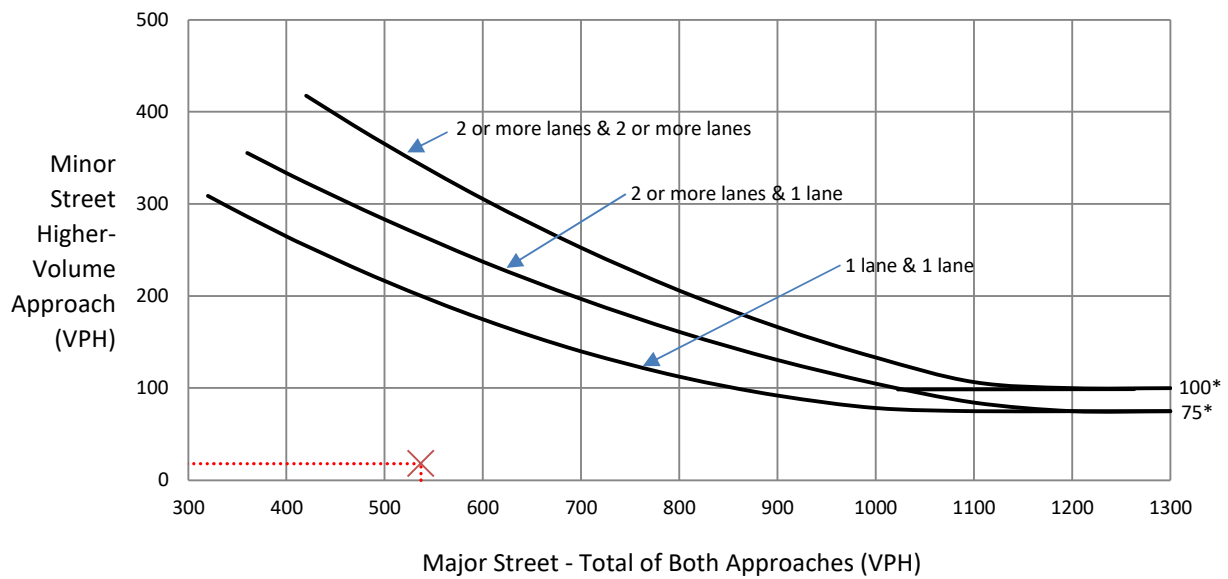
Figure C-2

**Las Palmas at Harley Knox Blvd - #1**  
**Opening Year With Project**  
**PM Peak Hour**

Major Street: Harley Knox Blvd Volume: 537  
Minor Street: Las Palmas Volume: 18

**Warrant 3, Peak Hour Vehicular Volume (70% Factor)**

(Community less than 10,000 population or above 40 mph on the major street)



**Traffic Signal Warrant Is NOT Satisfied**