Appendix I

Nance Street Trailer Yard Traffic Impact Analysis (Revised)

Ganddini Group
April 18, 2024

CASE NUMBERS:
DPR 22-00022, DPR 23-00009, AND
DPR 23-00010

NANCE STREET TRAILER YARD TRAFFIC IMPACT ANALYSIS (REVISED)

City of Perris

April 18, 2024

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

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DPR 22-00022, DPR 23-00009, AND
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NANCE STREET TRAILER YARD TRAFFIC IMPACT ANALYSIS (REVISED)

City of Perris

April 18, 2024

prepared by

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Project No. 19599

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EXECUTIVE SUMMARY

The purpose of this study is to evaluate the potential for transportation impacts resulting from development of the proposed project both in the context of the City of Perris' discretionary authority for conformance with locally established operational standards and the California Environmental Quality Act (CEQA). Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

This study was prepared in consultation with City of Perris staff and in accordance with the procedures and methodologies for assessing transportation impacts established by the City of Perris. To assess the project's conformance with local operational standards, this study evaluates the project's effect on traffic operations and, if necessary, identifies recommended improvements or corrective measures to alleviate operational deficiencies substantially caused or worsened by the proposed project. For CEQA purposes, this study also evaluates the significance of project-related transportation impacts as measured by vehicle miles traveled (VMT) relative to thresholds established by the City of Perris as the lead agency and, if necessary, identifies any feasible mitigation measures to mitigate any significant impacts.

Project Description

The project site is located west of Webster Street on both sides of Nance Street in the City of Perris, California on three non-contiguous sites totaling 9.73 acres. The project site is currently vacant. The project APN's are 314-153-058, 060, 062, 066, 070, and 082, and 314-160-013, 014, 016, 017, and 018.

The proposed project involves construction of a truck trailer yard consisting of 262 trailer parking spaces, 38 passenger car parking spaces, two 9,900 square foot mechanic bays totaling 19,800 square feet, and two 1,800 square foot office buildings totaling 3,600 square feet. The project proposes one full access driveway for trucks and one full access driveway for passenger cars on the portion of the project site north of Nance Street, one full access driveway for trucks and one full access driveway for passenger cars on the western portion of the project site south of Nance Street, and one full access driveway for trucks and passenger cars on the eastern portion of the project site south of Nance Street. For purposes of this analysis, the proposed project is anticipated to be constructed and fully operational by year 2026.

Existing Conditions

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

Project Trip Generation

The proposed project is forecast to generate 419 daily vehicle trips, including 17 vehicle trips during the AM peak hour and 27 vehicle trips during the PM peak hour. The proposed project is forecast to generate approximately 851 daily PCE trips, including 35 PCE trips during the AM peak hour and 51 PCE trips during the PM peak hour.

Levels of Service/Operational Analysis Findings (Non-CEQA)

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

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) With Project conditions. Therefore, the proposed project is forecast to result in no substantial operational deficiencies at the study intersections for Opening Year (2026) With Project conditions and no off-site improvements or corrective measures are recommended.

Gate Stacking Analysis Findings

The drive aisles provide for sufficient storage to accommodate entering vehicle queues without obstructing vehicles on Nance Street or adversely impacting on-site circulation, except for at Project Driveway 3. Thus, it is recommended that the storage length is either lengthened to a minimum of 75 feet, or the entrance gates at the project driveways remain open during operating hours.

Truck Turning Path Analysis Findings

Based on the truck turning path analysis, the project driveways are expected to adequately accommodate truck turning movements to/from Nance Street.

VMT Analysis Findings (CEQA)

The proposed project is presumed to have a less than significant impact on VMT since it satisfies one or more of the VMT screening criteria established by the City of Perris (the project site is forecast to generate fewer than 500 daily vehicle trips). No additional VMT modeling or mitigation measures are required.

1. INTRODUCTION

This section introduces the proposed project and the general scope of the analysis.

PROJECT DESCRIPTION

The project site is located west of Webster Street on both sides of Nance Street in the City of Perris, California on three non-contiguous sites totaling 9.73 acres. The project site is currently vacant. The project APN's are 314-153-058, 060, 062, 066, 070, and 082, and 314-160-013, 014, 016, 017, and 018. Figure 1 shows the project location map.

The proposed project involves construction of a truck trailer yard consisting of 262 trailer parking spaces, 38 passenger car parking spaces, two 9,900 square foot mechanic bays totaling 19,800 square feet, and two 1,800 square foot office buildings totaling 3,600 square feet. The project proposes one full access driveway for trucks and one full access driveway for passenger cars on the portion of the project site north of Nance Street, one full access driveway for trucks and one full access driveway for passenger cars on the western portion of the project site south of Nance Street, and one full access driveway for trucks and passenger cars on the eastern portion of the project site south of Nance Street. For purposes of this analysis, the proposed project is anticipated to be constructed and fully operational by year 2026. Figure 2 illustrates the project site plan.

SCOPE OF ANALYSIS

The scope of this analysis was determined in consultation with City of Perris staff as documented in the City-approved scoping agreement provided in Appendix B.

Study Area

Based on the study intersections identified in the approved scoping agreement, the study area consists of the following study intersections within City of Perris jurisdiction:

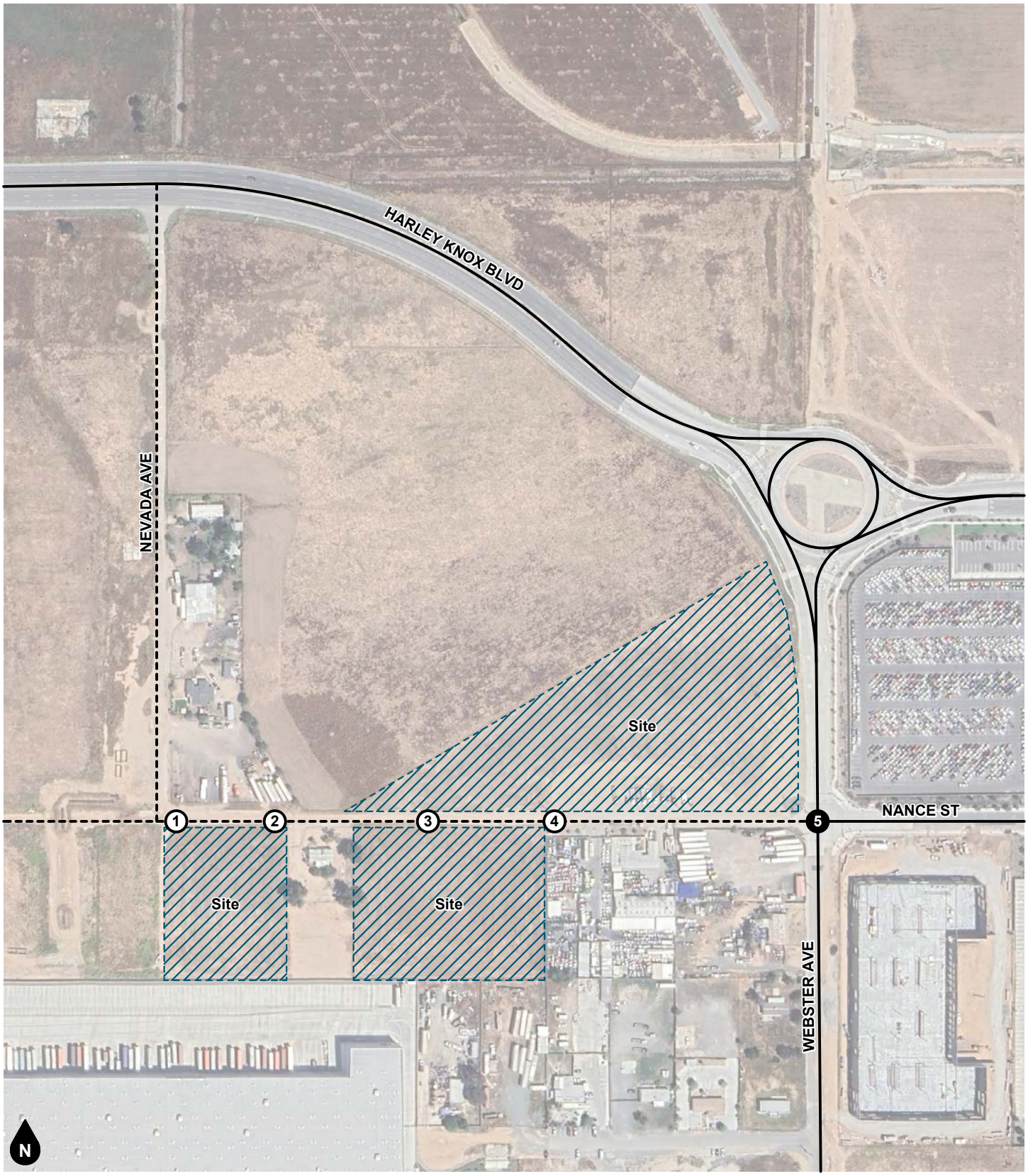
Study Intersections[1]	Jurisdiction
1. Project Driveway 1 (Truck Only) (NS) at Nance Street (EW)	City of Perris
2. Project Driveway 2 (Auto Only) (NS) at Nance Street (EW)	City of Perris
3. Project Driveway 3 (NS) at Nance Street (EW)	City of Perris
4. Project Driveway 4 (Truck Only) (NS) at Nance Street (EW)	City of Perris
5. Webster Avenue (NS) at Nance Street (EW)	City of Perris

Notes:
1. (NS) = North-South roadway; (EW) = East-West roadway

Analysis Scenarios

The following scenarios are analyzed for weekday AM and PM peak hour conditions:

- Existing (2024)
- Existing Plus Project (2024)
- Opening Year (2026) Without Project
- Opening Year (2026) With Project



Legend

Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

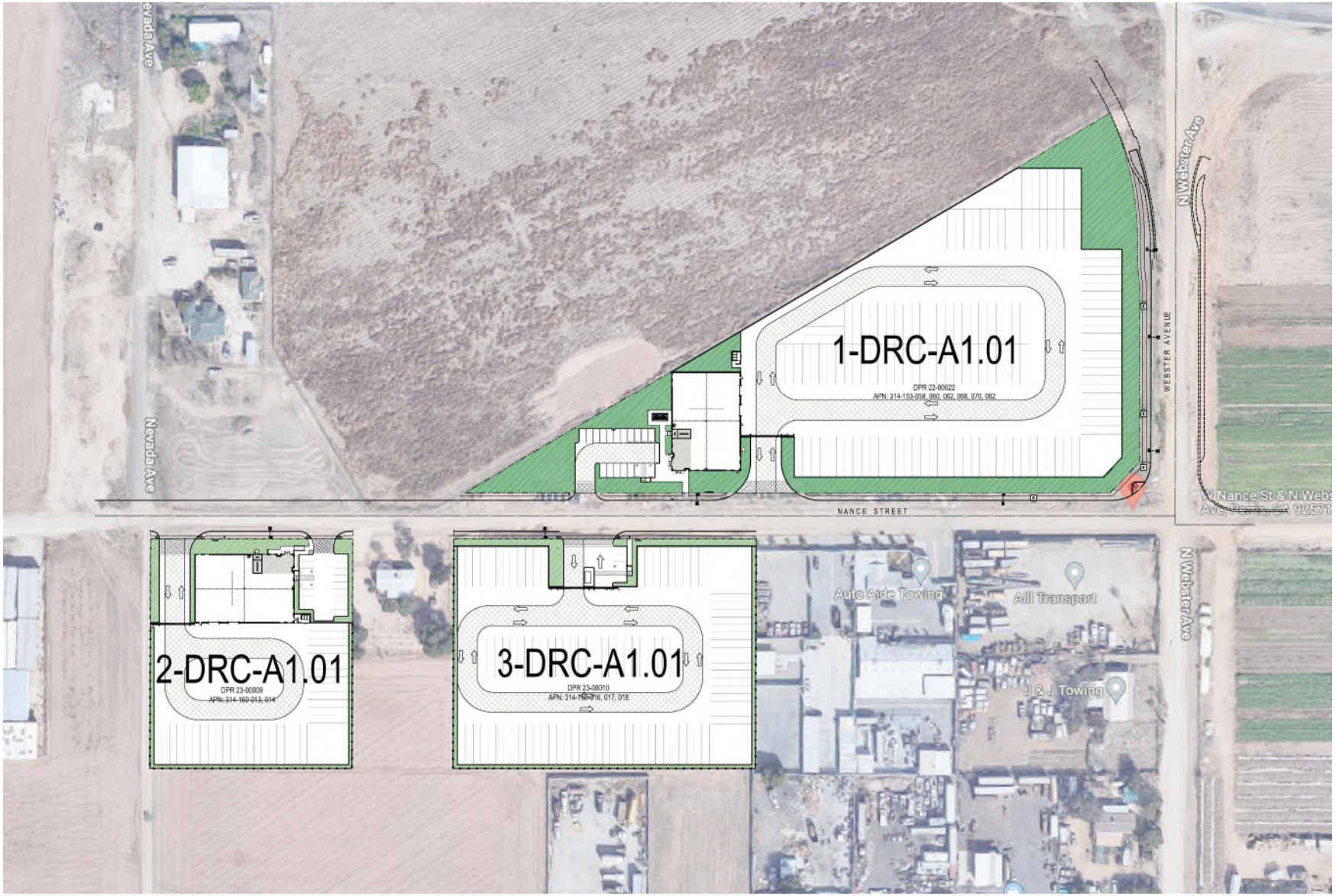


Figure 2
Project Site Plan (1 of 4)

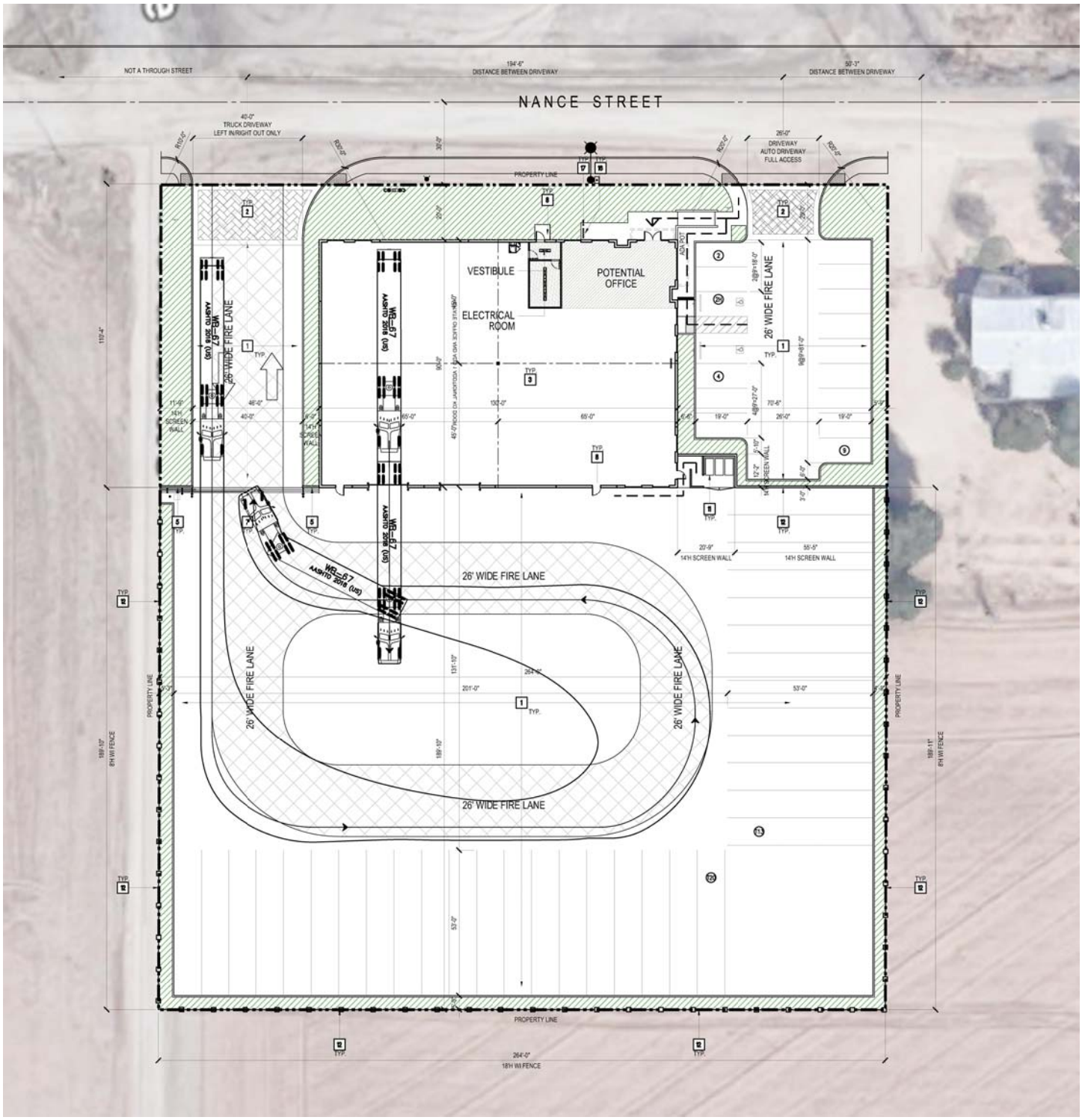


Figure 2
Project Site Plan (2 of 4)

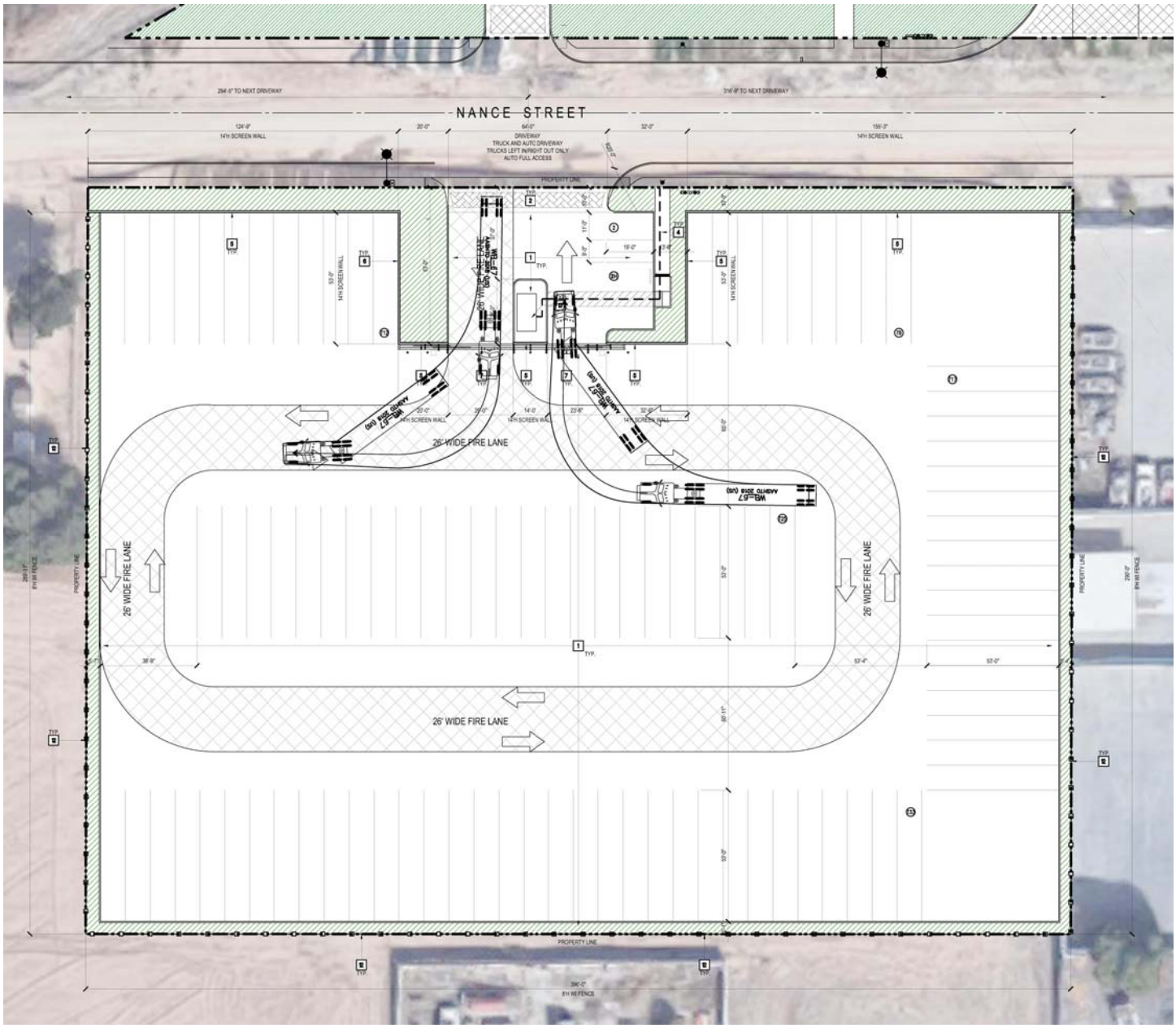


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Figure 2
Project Site Plan (3 of 4)

Figure 2
Project Site Plan (4 of 4)

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

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, 7th 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 the following target Levels of Service:

- LOS "D" along all City maintained roads (including intersections) and LOS "D" along I-215 and SR 74 (including intersections with local streets and roads). An exception to the local road standard is LOS "E", at intersections of any Arterials and Expressways with SR 74, the Ramona-Cajalco Expressway or at I-215 freeway ramps.

- LOS "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:

- A project-related traffic impact is considered direct when a study intersection operates at an acceptable Level of Service for existing conditions (without the project) and the addition of 50 or more AM or PM peak hour project trips causes the intersection delay to increase by 2 seconds or more and causes the intersection to operate at an unacceptable Level of Service for existing plus project conditions.

- A project-related traffic impact is considered direct when a study intersection operates at an unacceptable Level of Service for existing conditions (without the project) and the addition of 50 or more AM or PM peak hour project trips causes the intersection delay to increase by 2 seconds or more.

- A cumulative impact is considered direct when a study intersection is forecast to operate at an acceptable Level of Service without the project and with the addition of 50 or more AM or PM peak hour project trips causes the intersection delay to increase by 2 seconds or more and causes the intersection to operate at an unacceptable Level of Service.

- A cumulative impact is considered an indirect traffic impact when a study intersection is forecast to operate at an unacceptable Level of Service with the addition of cumulative/background traffic and the project contributes 50 or more AM or PM peak hour project trips and causes the intersection delay to increase by 2 seconds or more.

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.

VEHICLE MILES TRAVELED ANALYTICAL METHODOLOGY (CEQA)

The metric used to evaluate the transportation impact of land use and transportation projects under CEQA is known as vehicle miles traveled (VMT). In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Additional information and a detailed project assessment is provided in the Vehicle Miles Traveled section presented later in this report.

3. EXISTING CONDITIONS

This section describes the existing transportation setting in the project vicinity.

EXISTING ROADWAY SYSTEM

Figure 3 identifies the lane geometry and intersection traffic controls for Existing conditions based on a field survey of the study area. Regional access to the project site is provided by the Interstate 215 (I-215) Freeway located approximately 0.5 -0.7 miles west of the project site. Key roadways providing local circulation include Webster Avenue and Nance Street.

GENERAL PLAN CONTEXT

Figure 4 shows the City of Perris General Plan Circulation Element roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Perris standard roadway cross-sections are illustrated on Figure 5.

TRUCK ROUTES

The City of Perris General Plan truck routes are illustrated on Figure 6. Existing truck routes in the project vicinity are shown on Figure 6. There are currently designated truck routes along Harley Knox Boulevard north of Nance Street. Therefore, all trucks will need to proceed east on Nance Street from the project site, and then north on Webster Avenue to Harley Knox Boulevard.

TRANSIT SERVICE

Figure 7 shows Existing public transit facilities and routes in the project vicinity. As shown on Figure 7, the study area is currently not served by the Riverside Transit Agency (RTA) bus service near the project site.

BICYCLE AND PEDESTRIAN FACILITIES

The City of Perris Active Transportation Plan bikeways are illustrated on Figure 8. There are currently no existing bicycle lanes along Webster Avenue or Nance Street adjacent to the project site.

Existing pedestrian facilities in the project vicinity are shown on Figure 9. Sidewalks are not currently provided on Webster Avenue or Nance Street along the project site frontage.

EXISTING INTERSECTION VOLUMES

Figure 10 and Figure 11 show 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 June 2023 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.

The intersection movement counts separated trucks and cars by axle. A passenger car equivalent (PCE) factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axel trucks was applied to the intersection

movement counts. These PCE factors are from the County of Riverside *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled* (December 2020). Intersection turning movement count worksheets are provided in Appendix C.

EXISTING LEVELS OF SERVICE

The intersection Levels of Service for Existing conditions are shown in Table 1. Existing intersection Level of Service calculation worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service during the peak hours for Existing conditions.

Table 1
Existing Intersection Levels of Service

Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
5. Webster Ave at Nance St	TS	4.6	A	5.1	A

Notes:

(1) TS = Traffic Signal

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal, overall average intersection delay and LOS are shown.

(3) LOS = Level of Service

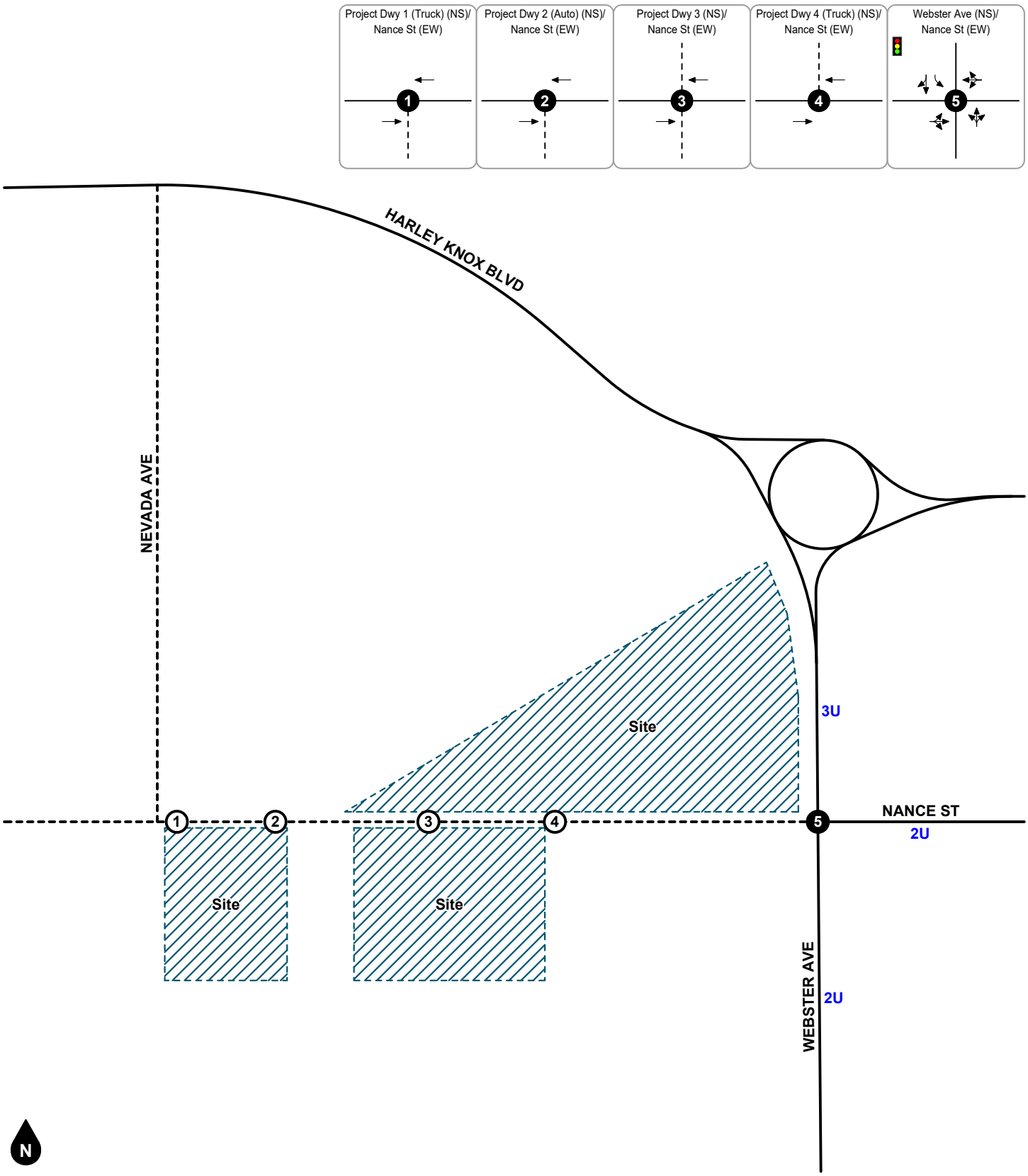


Figure 3
Existing Lane Geometry and Intersection Traffic Controls

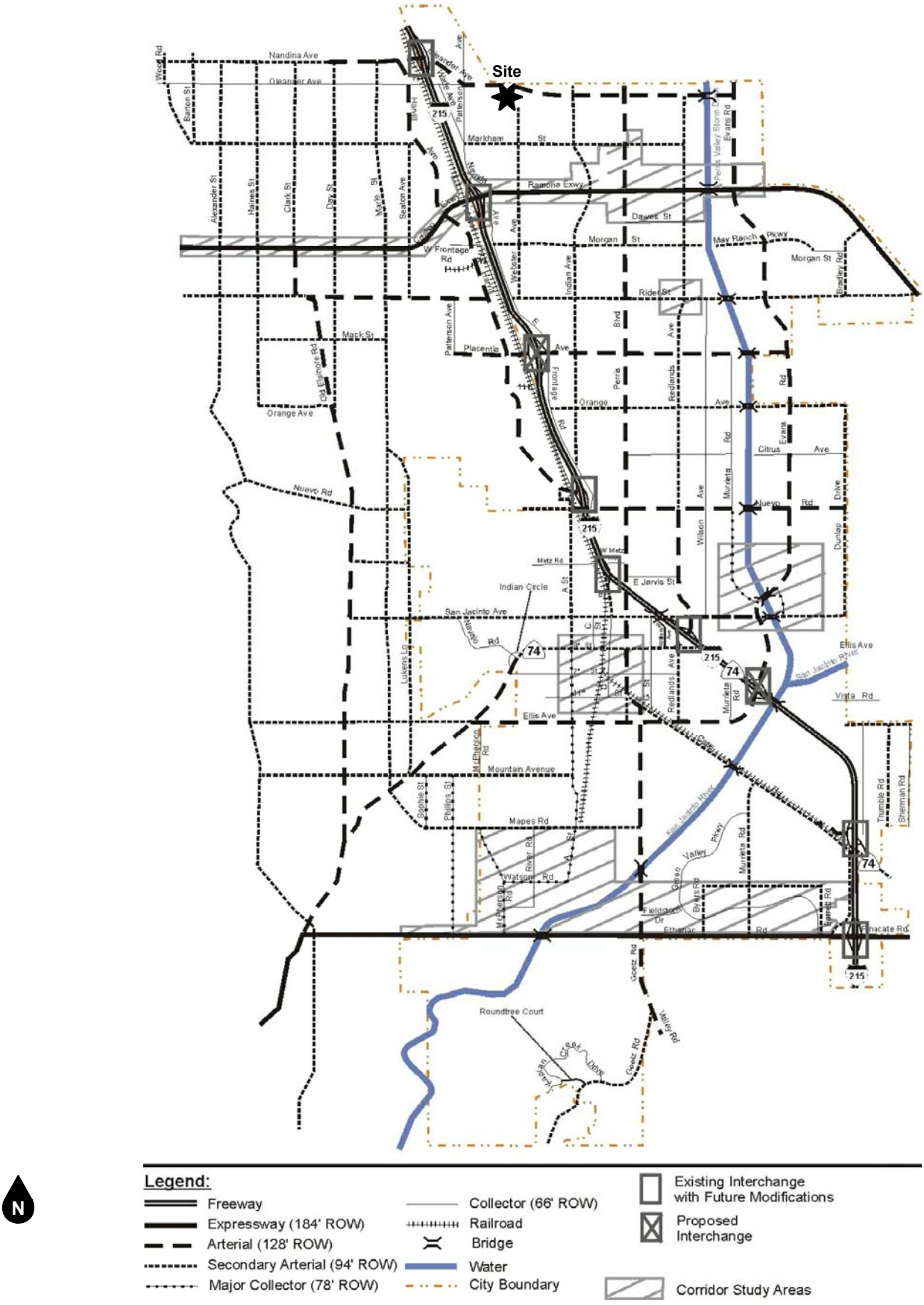


Figure 4
City of Perris General Plan Circulation Element

Source: City of Perris

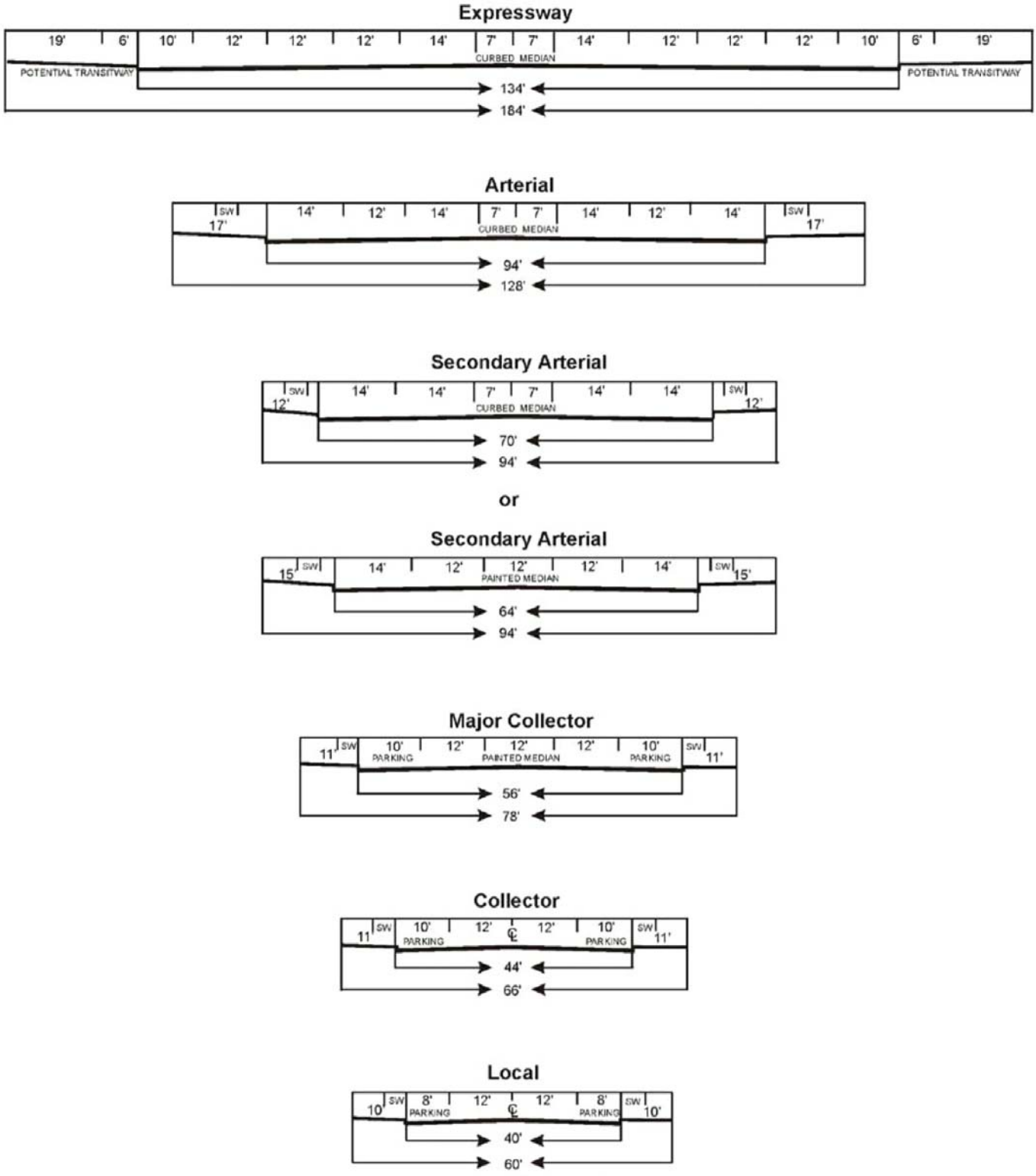


Figure 5
City of Perris General Plan Roadway Cross-Sections

Source: City of Perris

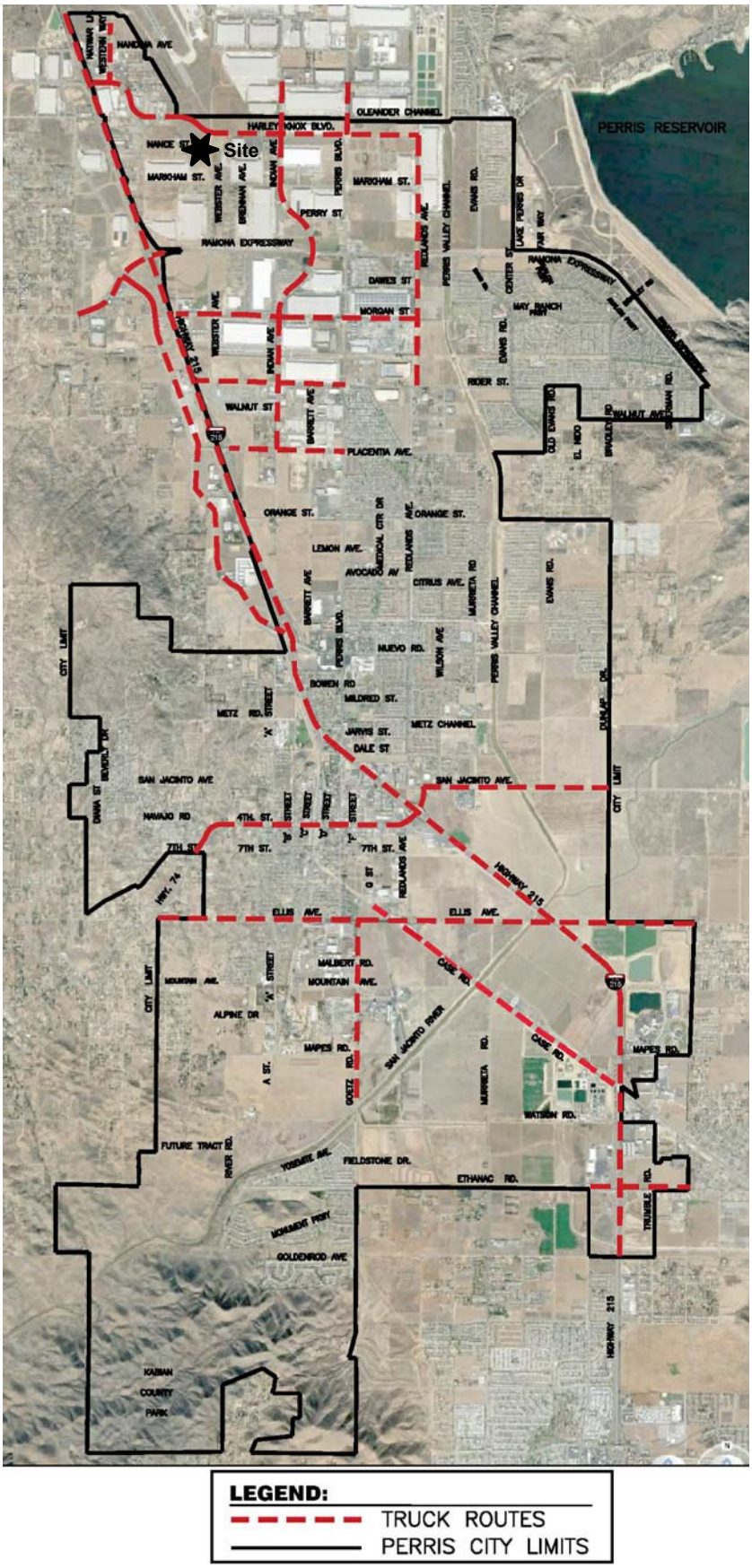


Figure 6
City of Perris General Plan Truck Routes

Source: City of Perris

Figure 7
Existing Transit Routes

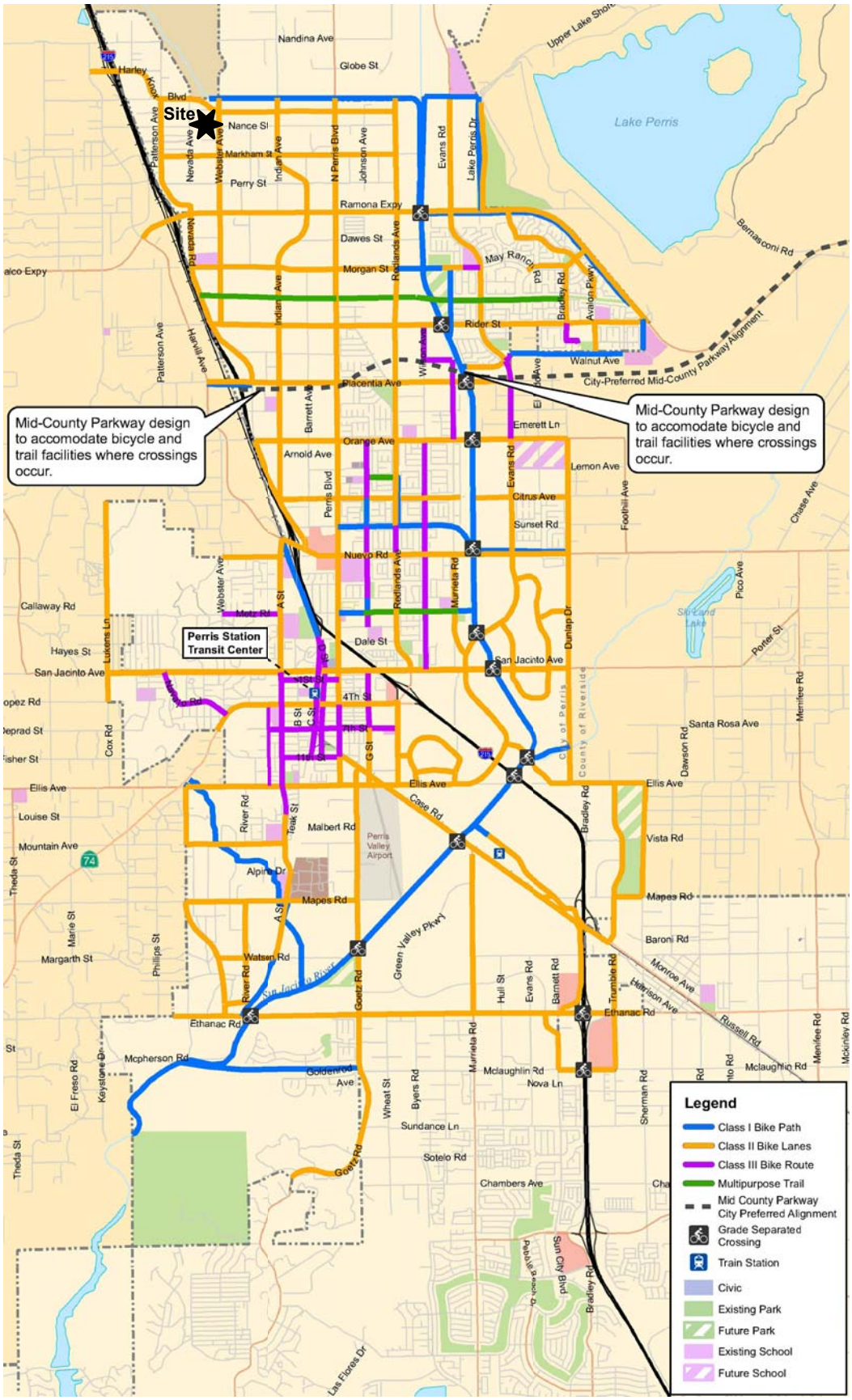


Figure 8
City of Perris General Plan Bikeway Systems

Source: City of Perris

Legend
- Sidewalk
- Cross Walk
- Bus Stop

Figure 9
Existing Pedestrian Facilities

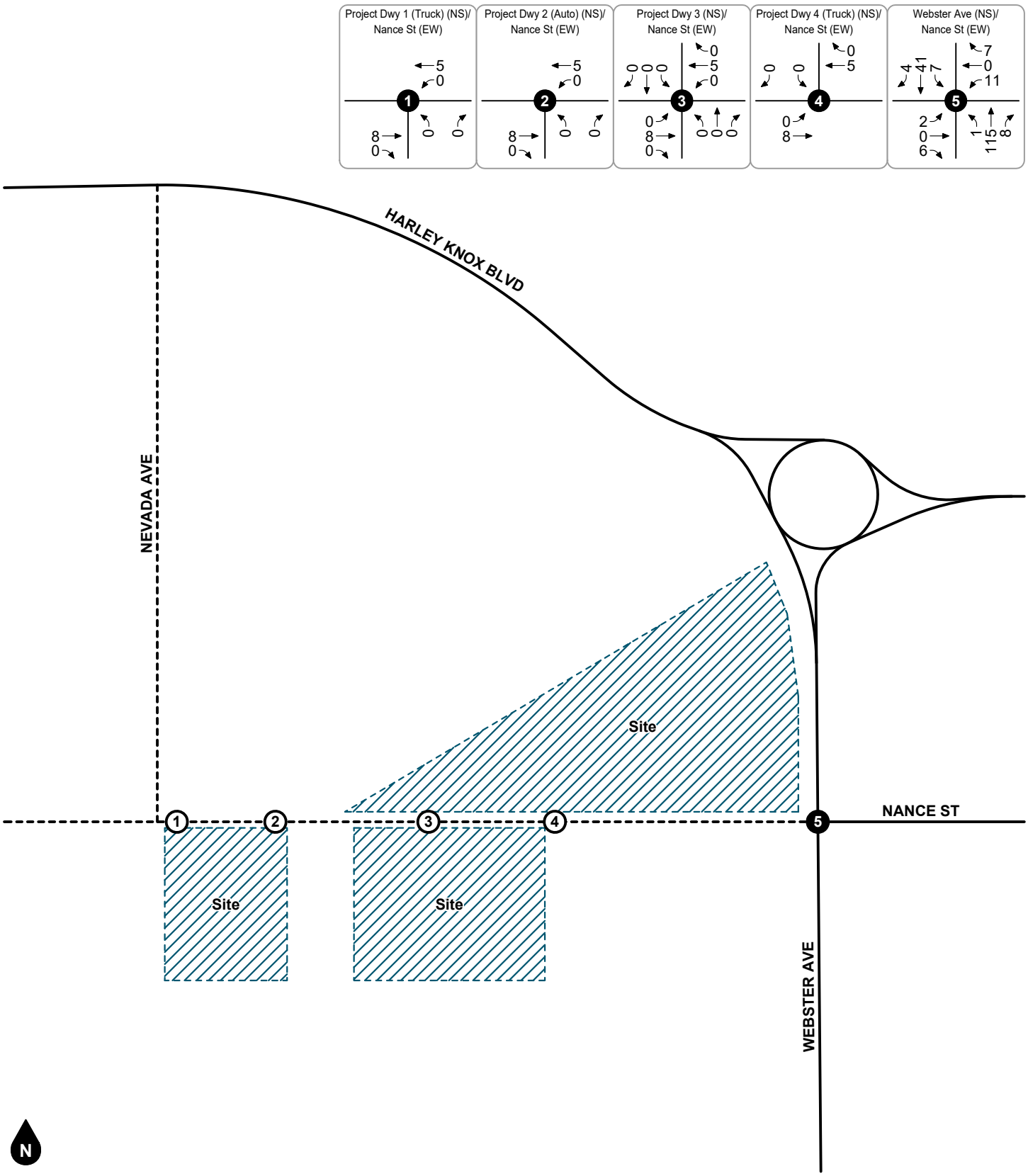


Figure 10
Existing AM Peak Hour Intersection Turning Movement Volumes

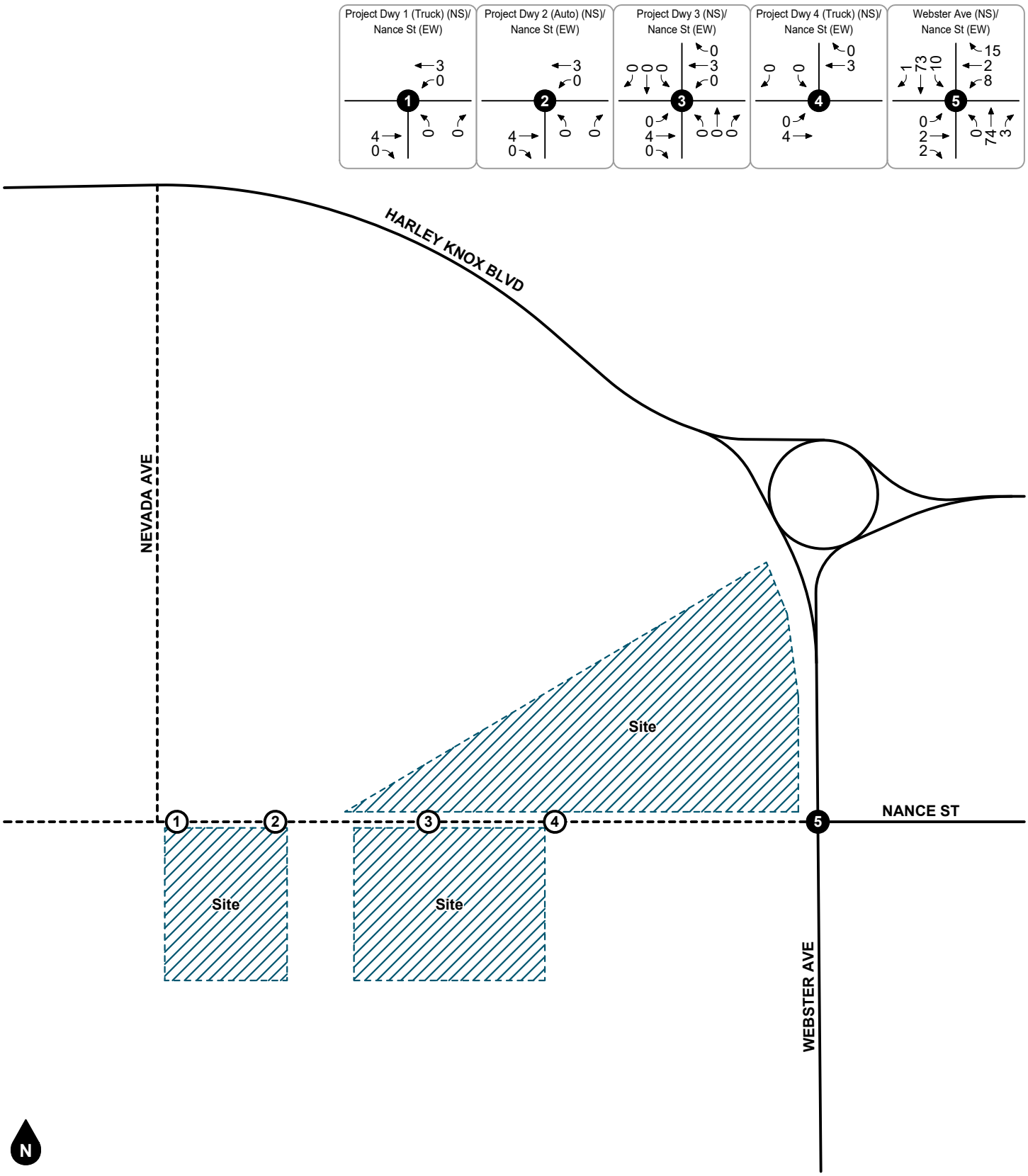


Figure 11
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT TRIP FORECASTS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated on figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows a summary of the observed trips and average rates based on trip generation surveys conducted at other outdoor trailer storage facilities in Southern California. Trip count worksheets for the following survey locations are provided in Attachment B:

1. 1691 South Auto Center Road, San Bernardino, CA (November 30, 2016);
2. 5087 Patterson Avenue, Perris, CA (January 23, 2019); and
3. 1935 5th Street, San Bernardino, CA (February 8, 2022).

These three outdoor trailer storage facilities were chosen for analysis as they are located in the Inland Empire, were previously approved and chosen for representative outdoor trailer storage yard facilities for prior traffic analysis, include office buildings and mechanic bays similar to the project site, and have on-site trailer parking space density comparative to the overall project site acreage similar to the project site.

Table 2 shows the project trip generation forecast based on the average trip generation rates derived from the survey locations noted above. As shown in Table 2, the proposed project is forecast to generate 419 daily vehicle trips, including 17 vehicle trips during the AM peak hour and 27 vehicle trips during the PM peak hour.

Truck Trips

In accordance with industry practice for truck-oriented uses, the project trip generation was also calculated in terms of Passenger Car Equivalent (PCE) trips based on a PCE factor of 2.0 for heavy trucks (2 & 3-axle) and a PCE factor of 3.0 for heavy trucks (4+-axle). As also shown in Table 2, this equates to 851 daily PCE trips, including 35 PCE trips during the AM peak hour and 51 PCE trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 12 shows the forecast project trip distribution patterns for passenger cars. Figure 13 shows the forecast directional distribution patterns for the project generated truck trips. The project trip distribution patterns were developed using engineering judgment in consultation with City of Perris staff and are based on review of existing volume data, surrounding land uses, designated truck routes, and the local and regional roadway facilities in the project vicinity.

Project AM and PM peak hour intersection turning movement volumes expected from the project are depicted on Figure 14 and Figure 15, respectively.

SITE ACCESS

This analysis assumes the following improvements will be constructed by the project and adjacent properties to provide project site access, as necessary based on Nance Street City of Perris General Plan classification as a Local (60-foot right-of-way):

- Project Driveway 1 (Truck Only) (NS) at Nance Street (EW) [Study Intersection #1]
  - Construct one inbound lane and one outbound lane with northbound stop-control for truck access only
  - Northbound: one shared left/right turn lane

- Eastbound: one shared through/right turn lane
- Westbound: one shared left turn/through lane

- Project Driveway 2 (Auto Only) (NS) at Nance Street (EW) [Study Intersection #2]
  - Construct one inbound lane and one outbound lane with northbound stop-control for passenger car access only
  - Northbound: one shared left/right turn lane
  - Eastbound: one shared through/right turn lane
  - Westbound: one shared left turn/through lane

- Project Driveway 3 (NS) at Nance Street (EW) [Study Intersection #3]
  - Construct one inbound lane and one outbound lane with northbound and southbound stop-control
  - Northbound: one shared left/through/right turn lane
  - Southbound: one shared left/through/right turn lane
  - Eastbound: one shared left/through/right turn lane
  - Westbound: one shared left/through/right turn lane

- Project Driveway 4 (Truck Only) (NS) at Nance Street (EW) [Study Intersection #4]
  - Construct one inbound lane and one outbound lane with southbound stop-control for truck access only
  - Southbound: one shared left/right turn lane
  - Eastbound: one shared left turn/through lane
  - Westbound: one shared through/right turn lane

Table 2
Summary of Trip Generation Surveys Conducted at Other Outdoor Trailer Storage Facilities

Vehicle Type	Quantity[1]	Observed Trip Generation[2]						
		AM Peak Hour			PM Peak Hour			
		In	Out	Total	In	Out	Total	Daily
Survey Site 1 (1691 Auto Center) [a]								
Trips:								
Passenger Car	12.74 AC	4	1	5	5	12	17	185
Trucks (2 & 3-Axle)	12.74 AC	0	5	5	11	3	14	172
Trucks (4+ Axle)	12.74 AC	3	3	6	2	0	2	146
Total		*7*	*9*	*16*	*18*	*15*	*33*	*503*
Rates:								
Passenger Car	per AC	0.314	0.078	0.392	0.392	0.942	1.334	14.521
Trucks (2 & 3-Axle)	per AC	0.000	0.392	0.392	0.863	0.235	1.098	13.501
Trucks (4+ Axle)	per AC	0.235	0.235	0.470	0.157	0.000	0.157	11.460
Total		*0.549*	*0.705*	*1.254*	*1.412*	*1.177*	*2.589*	*39.482*
Survey Site 2 (5087 Patterson Ave) [b]								
Trips:								
Passenger Car	4.50 AC	0	2	2	1	1	2	38
Trucks (2 & 3-Axle)	4.50 AC	1	5	6	4	0	4	73
Trucks (4+ Axle)	4.50 AC	1	0	1	0	3	3	57
Total		*2*	*7*	*9*	*5*	*4*	*9*	*168*
Rates:								
Passenger Car	per AC	0.000	0.444	0.444	0.222	0.222	0.444	8.444
Trucks (2 & 3-Axle)	per AC	0.222	1.111	1.333	0.889	0.000	0.889	16.222
Trucks (4+ Axle)	per AC	0.222	0.000	0.222	0.000	0.667	0.667	12.667
Total		*0.444*	*1.555*	*1.999*	*1.111*	*0.889*	*2*	*37.333*
Survey Site 3 (1935 5th St) [c]								
Trips:								
Passenger Car	5.79 AC	1	1	2	4	3	7	99
Trucks (2 & 3-Axle)	5.79 AC	2	3	5	3	3	6	89
Trucks (4+ Axle)	5.79 AC	1	4	5	7	1	8	115
Total		*4*	*8*	*12*	*14*	*7*	*21*	*303*
Rates:								
Passenger Car	per AC	0.173	0.173	0.346	0.691	0.518	1.209	17.098
Trucks (2 & 3-Axle)	per AC	0.345	0.518	0.863	0.518	0.518	1.036	15.371
Trucks (4+ Axle)	per AC	0.173	0.691	0.864	1.209	0.173	1.382	19.862
Total		*0.691*	*1.382*	*2.073*	*2.418*	*1.209*	*3.627*	*52.331*
AVERAGE RATES								
Passenger Car Trips	per AC	0.162	0.232	0.394	0.435	0.561	0.996	13.354
Trucks (2 & 3-Axle)	per AC	0.189	0.674	0.863	0.757	0.251	1.008	15.031
Trucks (4+ Axle)	per AC	0.210	0.309	0.519	0.455	0.280	0.735	14.663
Total		*0.561*	*1.214*	*1.775*	*1.647*	*1.092*	*2.739*	*43.049*

Notes:

1. AC = Acre(s)
2. Source: Trip generation surveys conducted at the following outdoor trailer storage facilities (see Appendix B):
   [a] 1691 South Auto Center Road, San Bernardino, CA (November 30, 2016);
   [b] 5087 Patterson Avenue, Perris, CA (January 23, 2019);
   [c] 1935 5th St, San Bernardino, CA (February 8, 2022).

Table 3
Project Trip Generation

Vehicle Type	Quantity[1]	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Trip Generation Rates[2]								
Passenger Car Trips	per AC	0.162	0.232	0.394	0.435	0.561	0.996	13.354
Trucks (2 & 3-Axle)	per AC	0.189	0.674	0.863	0.757	0.251	1.008	15.031
Trucks (4+ Axle)	per AC	0.210	0.309	0.519	0.455	0.280	0.735	14.663
Total		0.561	1.214	1.775	1.647	1.092	2.739	43.049
Vehicle Trips Generated								
Passenger Car	9.73 AC	2	2	4	4	5	10	130
Trucks (2 & 3-Axle)	9.73 AC	2	7	8	7	2	10	146
Trucks (4+ Axle)	9.73 AC	2	3	5	4	3	7	143
Total		*6*	*12*	*17*	*15*	*10*	*27*	*419*
PCE Trips Generated	PCE Factors							
Passenger Car	1.00 PCE	2	2	4	4	5	10	130
Trucks (2 & 3-Axle)	2.00 PCE	4	14	16	14	4	20	292
Trucks (4+ Axle)	3.00 PCE	6	9	15	12	9	21	429
Total		*12*	*25*	*35*	*30*	*18*	*51*	*851*

Notes:
1. AC = Acre(s)

2. Source: Trip generation surveys conducted at three trailer storage uses in Southern California; see Table 2.

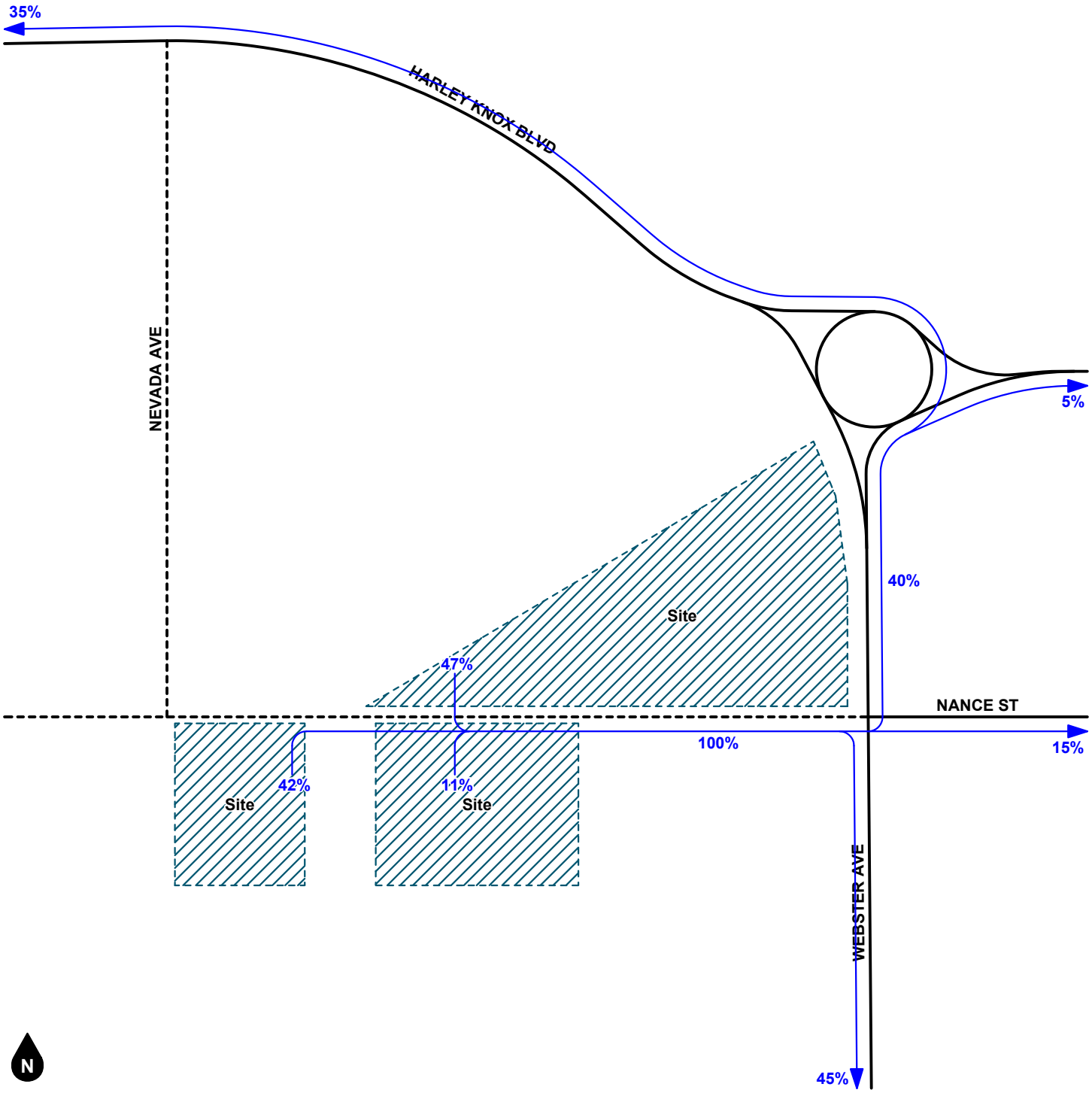


Figure 12
Project Trip Distribution - Passenger Cars

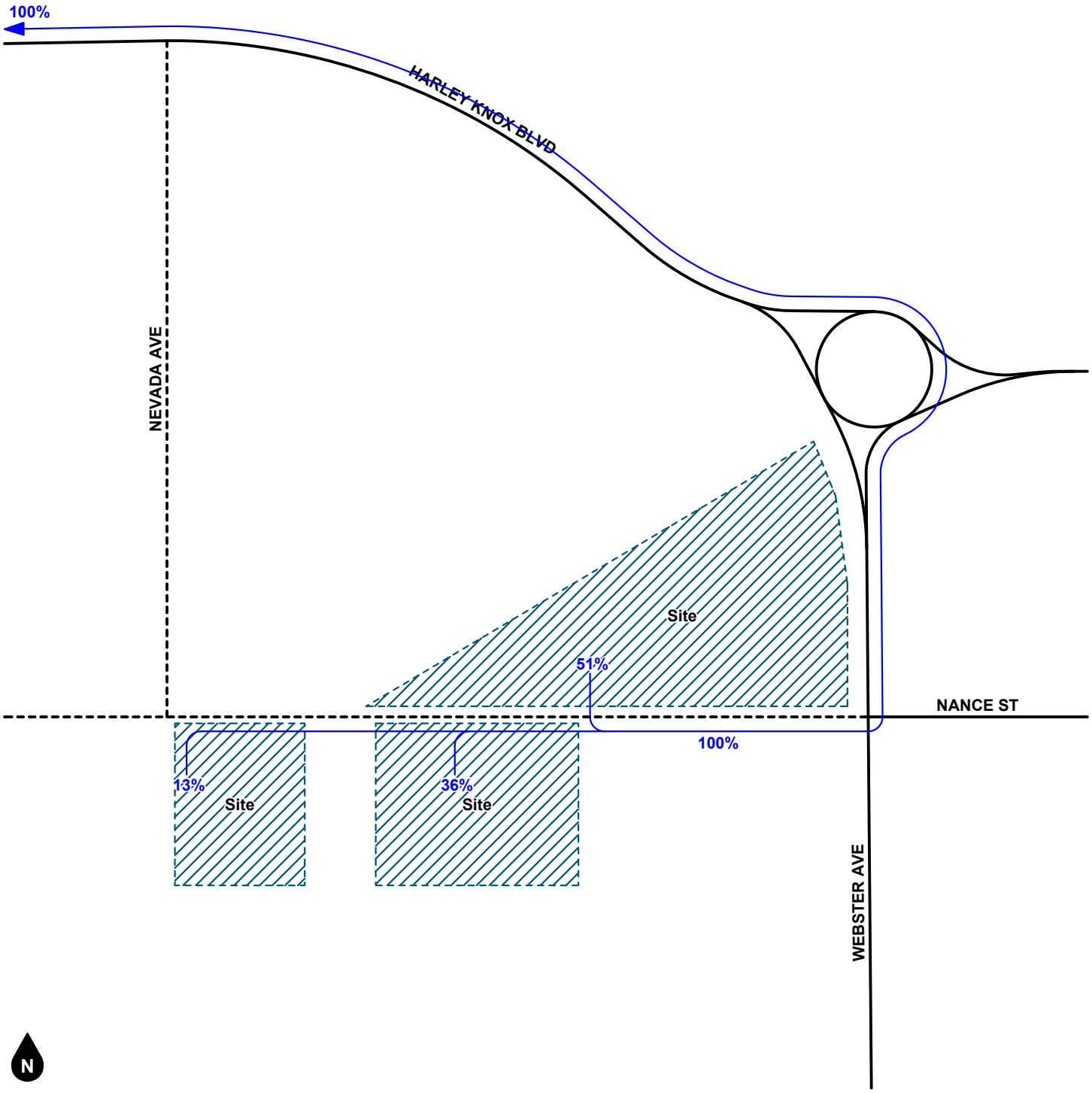


Figure 13
Project Trip Distribution - Trucks

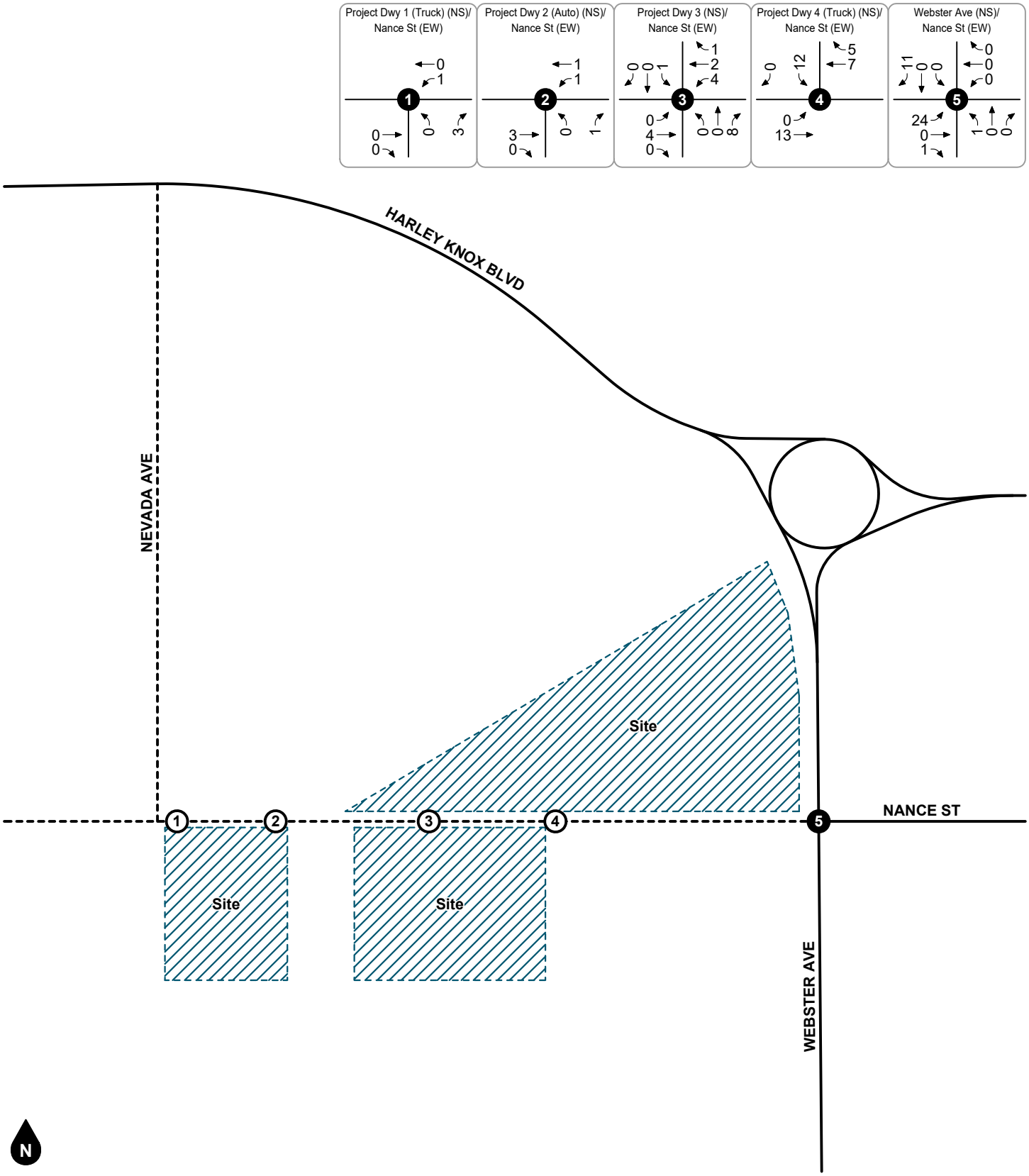


Figure 14
Project AM Peak Hour Intersection Turning Movement Volumes

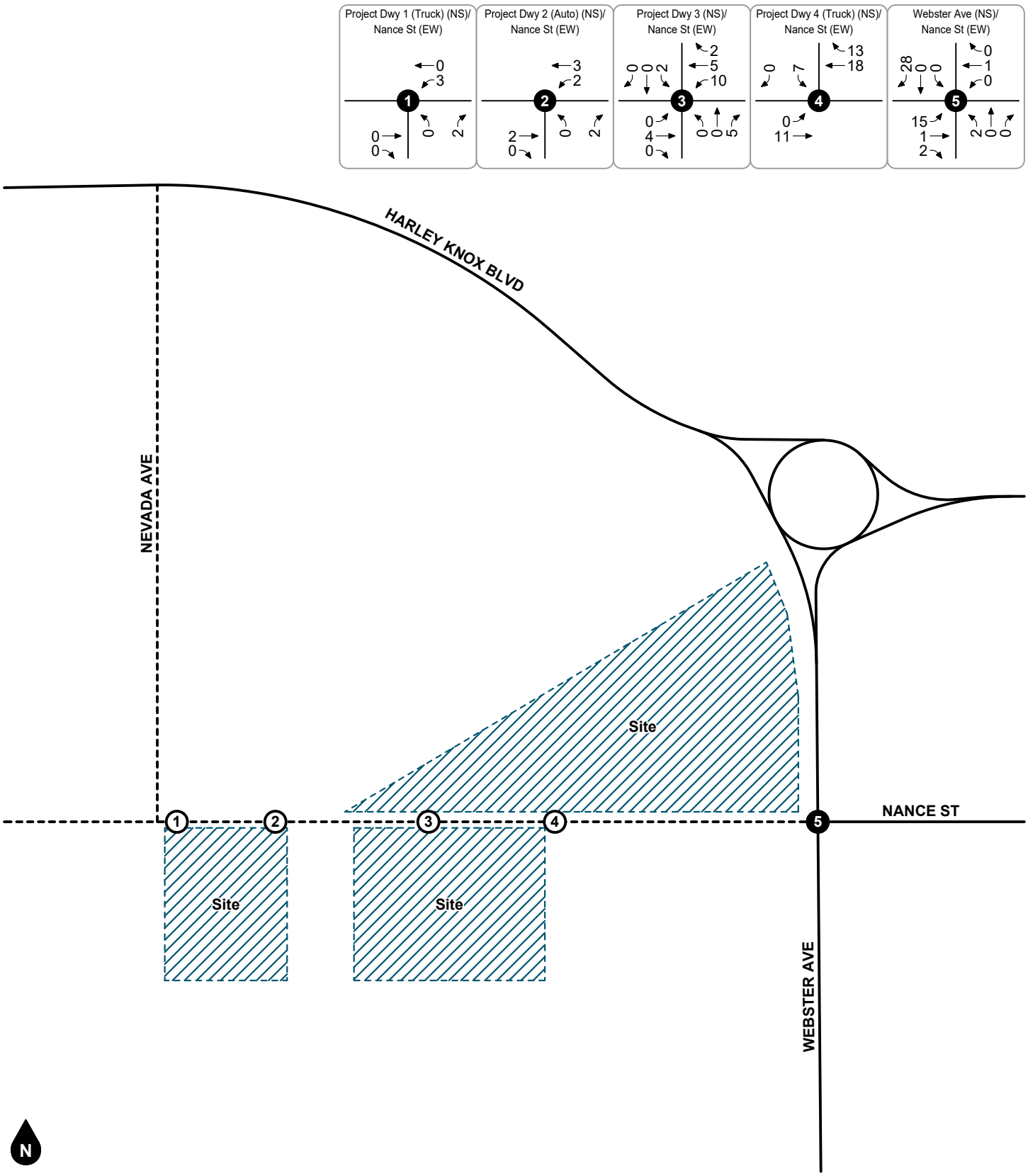


Figure 15
Project PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

This section describes how future volume forecasts for each analysis scenario were developed. Forecast study area volumes are illustrated on figures contained in this section.

CUMULATIVE TRIPS

Ambient Growth Rate

To account for ambient growth on roadways, existing 2024 roadway volumes were increased by a growth rate of three percent (3%) per year over two years for Opening Year (2026) conditions. This equates to a total growth factor of approximately 1.0609. The ambient growth rate was conservatively applied to all movements at the study intersections.

Other Development

To account for trips generated by future development, trips generated by pending or approved other development projects in the City of Perris, City of Moreno Valley, and County of Riverside were added to the study area. Table 4 shows the other development trip generation and Figure 16 exhibits the other development location map.

Figure 17 and Figure 18 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

ANALYSIS SCENARIO VOLUME FORECASTS

Existing Plus Project

Existing Plus Project volume forecasts were developed by adding the project generated trips to Existing volumes. Existing Plus Project AM and PM peak hour intersection turning movement volumes are shown on Figure 19 and Figure 20.

Opening Year (2026) Without Project

Opening Year (2026) Without Project volume forecasts were developed by adding ambient growth and other development trips to Existing volumes. Opening Year (2026) Without Project AM and PM peak hour intersection turning movement volumes are shown on Figure 21 and Figure 22.

Opening Year (2026) With Project

Opening Year (2026) With Project volume forecasts were developed by adding project generated trips to the Opening Year (2026) Without Project forecast. Opening Year (2026) With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 23 and Figure 24.

Table 4 (1 of 3)
Other Development Trip Generation

Map ID	Project Name	Land Use	Quantity	Units[1]	Trips Generated[2]						
					AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	Daily
	City of Perris										
1	Patterson - Nance Warehouse Project[3]	High-Cube Transload	770.000	TSF							
		- Cars			40	6	46	18	51	69	908
		- Trucks			21	21	42	10	13	23	430
2	Natwar Ind	High-Cube Warehouse	420.000	TSF							
		- Cars			19	6	25	11	27	38	496
		- Trucks			13	13	26	3	3	6	236
3	Oleander Cultivation	Light Industrial	12.985	TSF							
		- Cars			8	1	9	1	7	8	60
		- Trucks			0	0	0	0	0	0	10
4	Canyon Steel (CS)	Light Industrial	25.000	TSF							
		- Cars			16	2	18	2	14	16	116
		- Trucks			0	0	0	0	0	0	14
5	Harley Knox 25k	Light Industrial	25.000	TSF							
		- Cars			16	2	18	2	14	16	116
		- Trucks			0	0	0	0	0	0	14
6	Rockfeller Group Indus	High-Cube Warehouse	263.000	TSF							
		- Cars			12	4	16	7	17	24	310
		- Trucks			10	10	20	3	3	6	147
7	Park Ind	Light Industrial	31.000	TSF							
		- Cars			20	3	23	3	17	20	143
		- Trucks			0	0	0	0	0	0	19
8	Markham Industrial / Dedeau Properties	Light Industrial	89.000	TSF							
		- Cars			57	8	65	8	49	57	411
		- Trucks			0	0	0	0	0	0	52
9	Holistic Inc. Cultivation	Light Industrial	5.000	TSF							
		- Cars			3	0	3	0	3	3	23
		- Trucks			0	0	0	0	0	0	3
10	Marijuana Manufacturing (MM)	Light Industrial	1.000	TSF							
		- Cars			1	0	1	0	1	1	5
		- Trucks			0	0	0	0	0	0	0
11	Truck Storage Yard		--	--	--	--	--	--	--	--	--
12	Integra - Expansion (IT-E)	High-Cube Warehouse	273.000	TSF							
		- Cars			13	4	17	7	18	25	322
		- Trucks			10	10	20	3	3	6	155
13	Pheland Indus	Warehousing	109.000	TSF							
		- Cars			13	4	17	5	12	17	121
		- Trucks			3	3	6	3	3	6	168

Table 4 (2 of 3)
Other Development Trip Generation

Map ID	Project Name	Land Use	Quantity	Units[1]	Trips Generated[2]						
					AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	Daily
14	Serrao Ind	Light Industrial	3.500	TSF							
		- Cars			2	0	2	0	2	2	16
		- Trucks			0	0	0	0	0	0	0
15	Michael Goodwin Indst. Realy Trust	High-Cube Warehouse	345.316	TSF							
		- Cars			16	5	21	9	22	31	407
		- Trucks			10	10	20	3	3	6	196
16	First Industrial	High-Cube Warehouse	354.000	TSF							
		- Cars			16	5	21	9	23	32	418
		- Trucks			10	10	20	3	3	6	199
17	Kwasizur Indu	Warehousing	138.000	TSF							
		- Cars			16	5	21	6	15	21	153
		- Trucks			3	3	6	3	3	6	211
18	March Plaza PDO	Light Industrial	66.686	TSF							
		- Cars			43	6	49	6	37	43	308
		- Trucks			0	0	0	0	0	0	38
19	March Plaza (7-Eleven)	Light Industrial	3.000	TSF							
		- Cars			2	0	2	0	2	2	14
		- Trucks			0	0	0	0	0	0	0
20	Brew Indus	Light Industrial	62.000	TSF							
		- Cars			40	5	45	6	34	40	286
		- Trucks			0	0	0	0	0	0	38
21	Lakecreek at Harley Knox	Warehousing	143.000	TSF							
		- Cars			17	5	22	6	15	21	159
		- Trucks			3	3	6	3	3	6	219
22	Beyond Market Gas Station[4]	Gas Station	16.000	FP	85	85	170	81	81	162	1,401
23	First Harley Knox Ind	Warehousing	154.250	TSF							
		- Cars			18	5	23	6	17	23	171
		- Trucks			3	3	6	6	3	9	235
24	Proficiency Capital LLC	Warehousing	143.913	TSF							
		- Cars			17	5	22	6	16	22	160
		- Trucks			3	3	6	3	3	6	219
25	Nance Ind	Warehousing	156.000	TSF							
		- Cars			18	5	23	7	17	24	173
		- Trucks			3	3	6	3	3	6	239

Table 4 (3 of 3)
Other Development Trip Generation

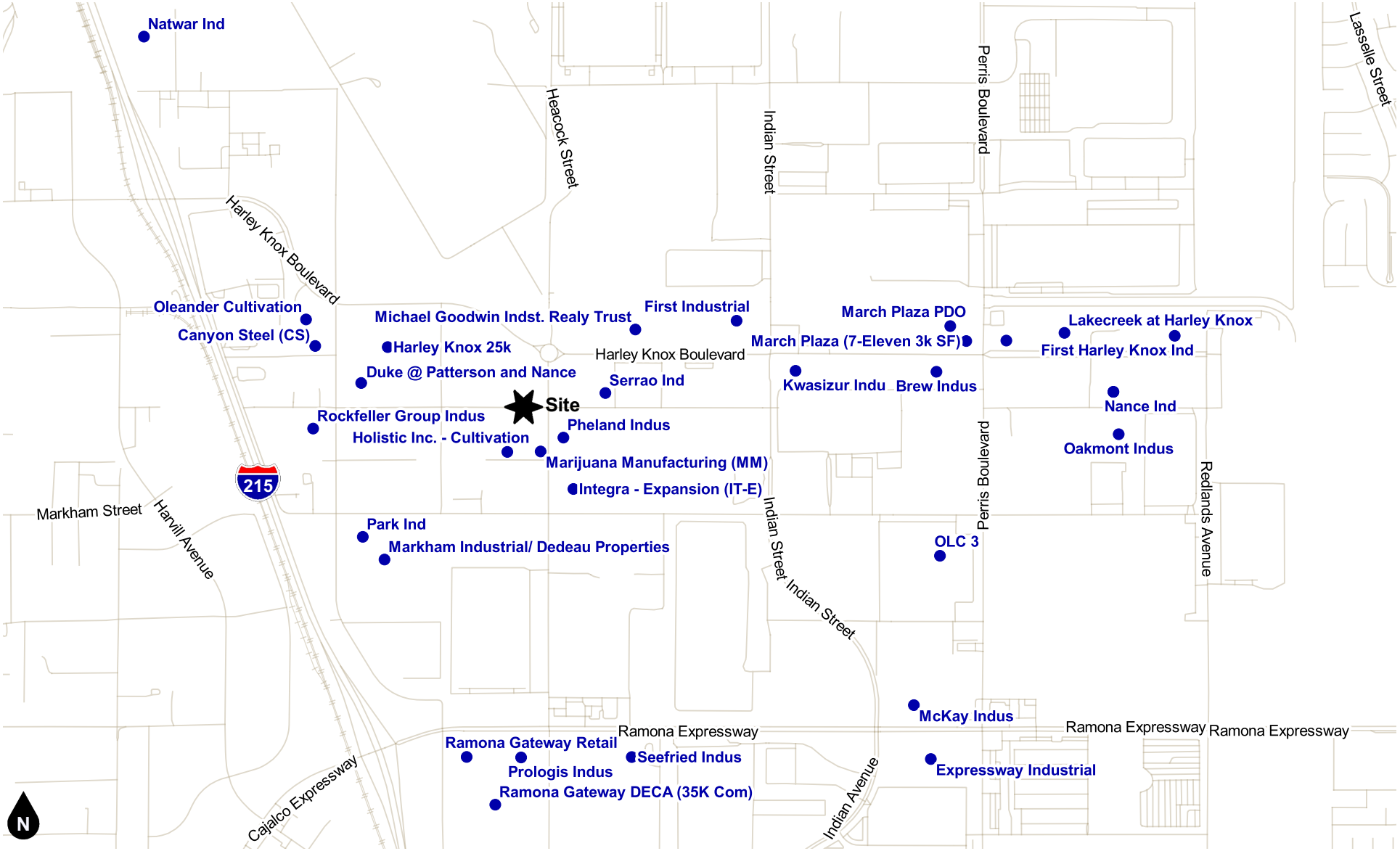
Map ID	Project Name	Land Use	Quantity	Units[1]	Trips Generated[2]						
					AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	Daily
26	Oakmont Indus	High-Cube Warehouse	202.100	TSF							
		- Cars			9	3	12	5	13	18	238
		- Trucks			3	3	6	3	3	6	113
27	Truck Terminal	Truck Terminal	--	--	--	--	--	--	--	--	--
28	OLC 3	High-Cube Warehouse	879.000	TSF							
		- Cars			40	12	52	22	57	79	1,037
		- Trucks			22	22	44	13	13	26	493
29	Ramona Gateway Retail	Commercial Retail	37.215	TSF	53	35	88	123	123	246	2,026
30	Ramona Gateway DECA	High-Cube Warehouse	950.000	TSF							
		- Cars			44	13	57	24	62	86	1,121
		- Trucks			25	25	50	13	13	26	534
31	Prologis Industrial	High-Cube Warehouse	551.922	TSF							
		- Cars			25	8	33	14	36	50	651
		- Trucks			13	13	26	10	10	20	308
32	Seefriend Industrial	Warehousing	165.000	TSF							
		- Cars			19	6	25	7	18	25	183
		- Trucks			3	3	6	6	3	9	252
33	expansion	Parking	--	--	--	--	--	--	--	--	--
34	McKay Indus	High-Cube Warehouse	232.000	TSF							
		- Cars			11	3	14	6	15	21	274
		- Trucks			3	3	6	3	3	6	132
35	Expressway Industrial	High-Cube Warehouse	347.000	TSF							
		- Cars			16	5	21	9	23	32	409
		- Trucks			10	10	20	3	3	6	196
	City of Moreno Valley										
36	Heacock Commerce Center	High-Cube Warehouse	863.967	TSF							
		- Cars			40	12	52	22	56	78	1,019
		- Trucks			22	22	44	13	13	26	485
37	TR 37725	Single-Family Residential	66	DU	12	34	46	39	23	62	622
38	Moreno Valley Logistics Center	High-Cube Warehouse	1,736.180	TSF							
		- Cars			80	24	104	43	113	156	2,049
		- Trucks			41	41	82	22	22	44	976
Total					**1,091**	**560**	**1,651**	**652**	**1,179**	**1,831**	**22,657**

Notes:
(1) TSF = Thousand Square Feet; DU = Dwelling Units

(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: *Patterson-Nance Warehouse Project Traffic Impact Analysis* , Albert A. Webb Associates, January 2022.

(4) Source: *Perris at Harley Knox Food Mart Project Traffic Impact Analysis* , Ganddini Group, Inc., October 6, 2020.



Legend
- Other Development

Figure 16
Other Development Location Map

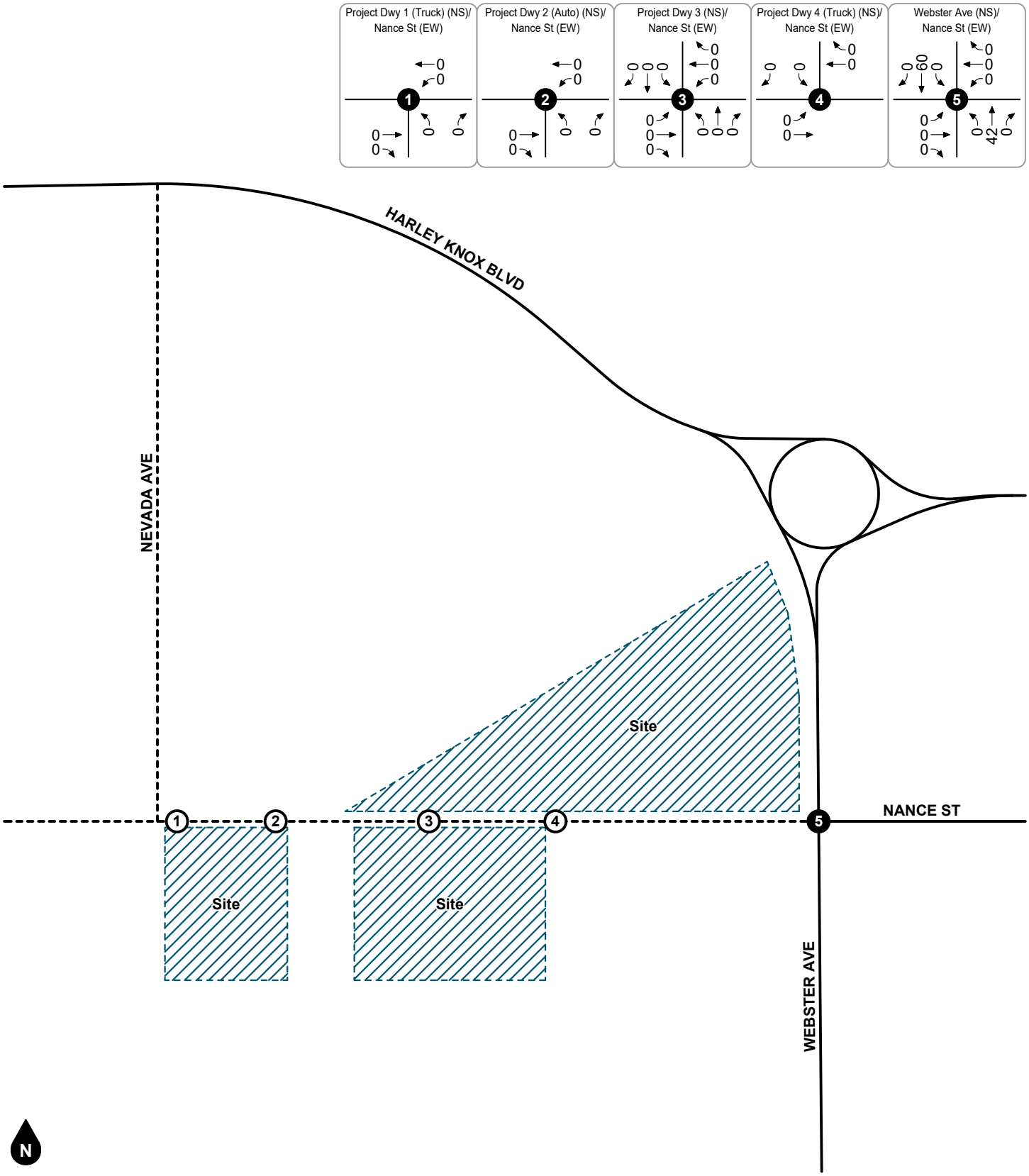


Figure 17
Other Development
AM Peak Hour Intersection Turning Movement Volumes

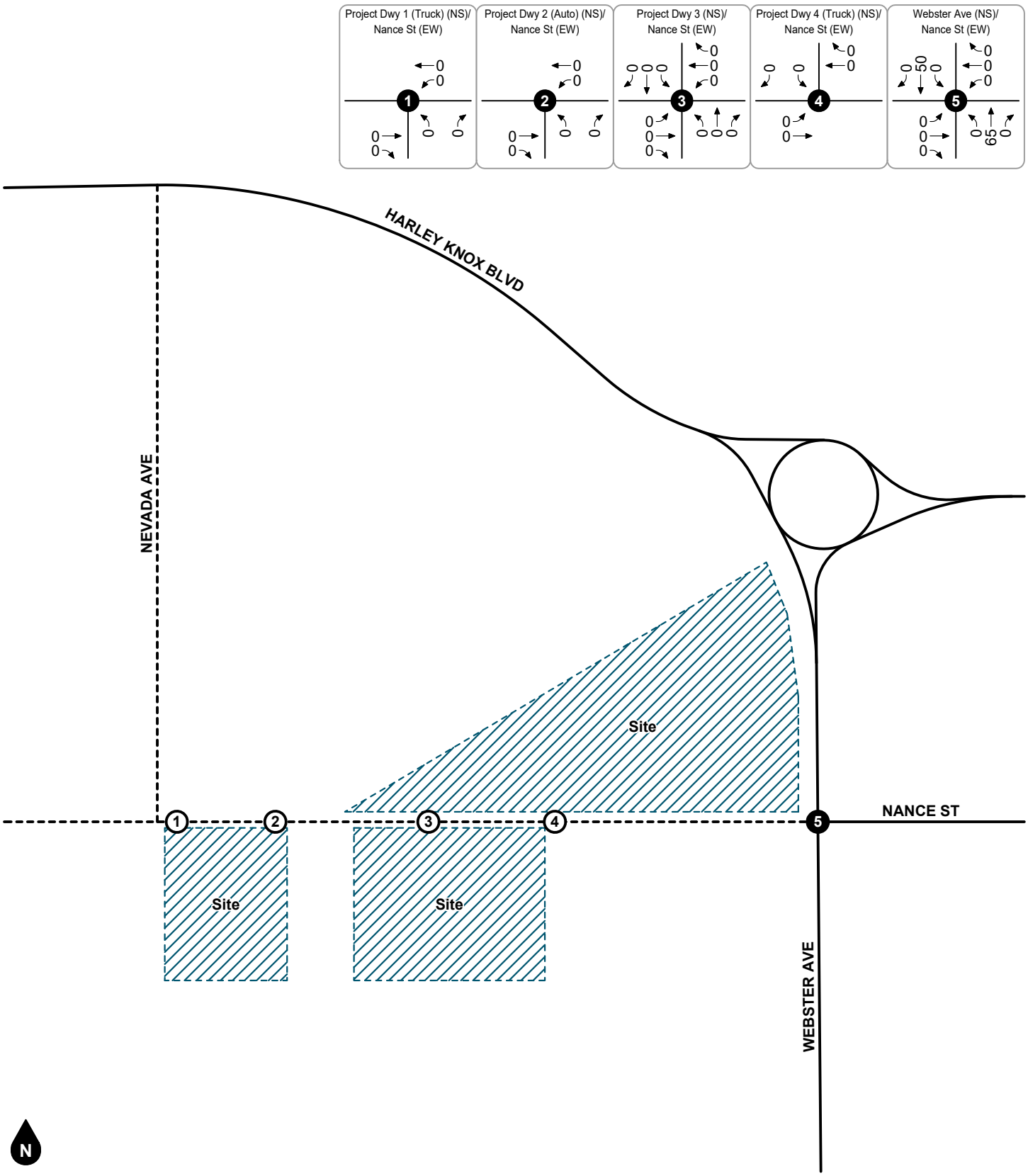


Figure 18
Other Development
PM Peak Hour Intersection Turning Movement Volumes

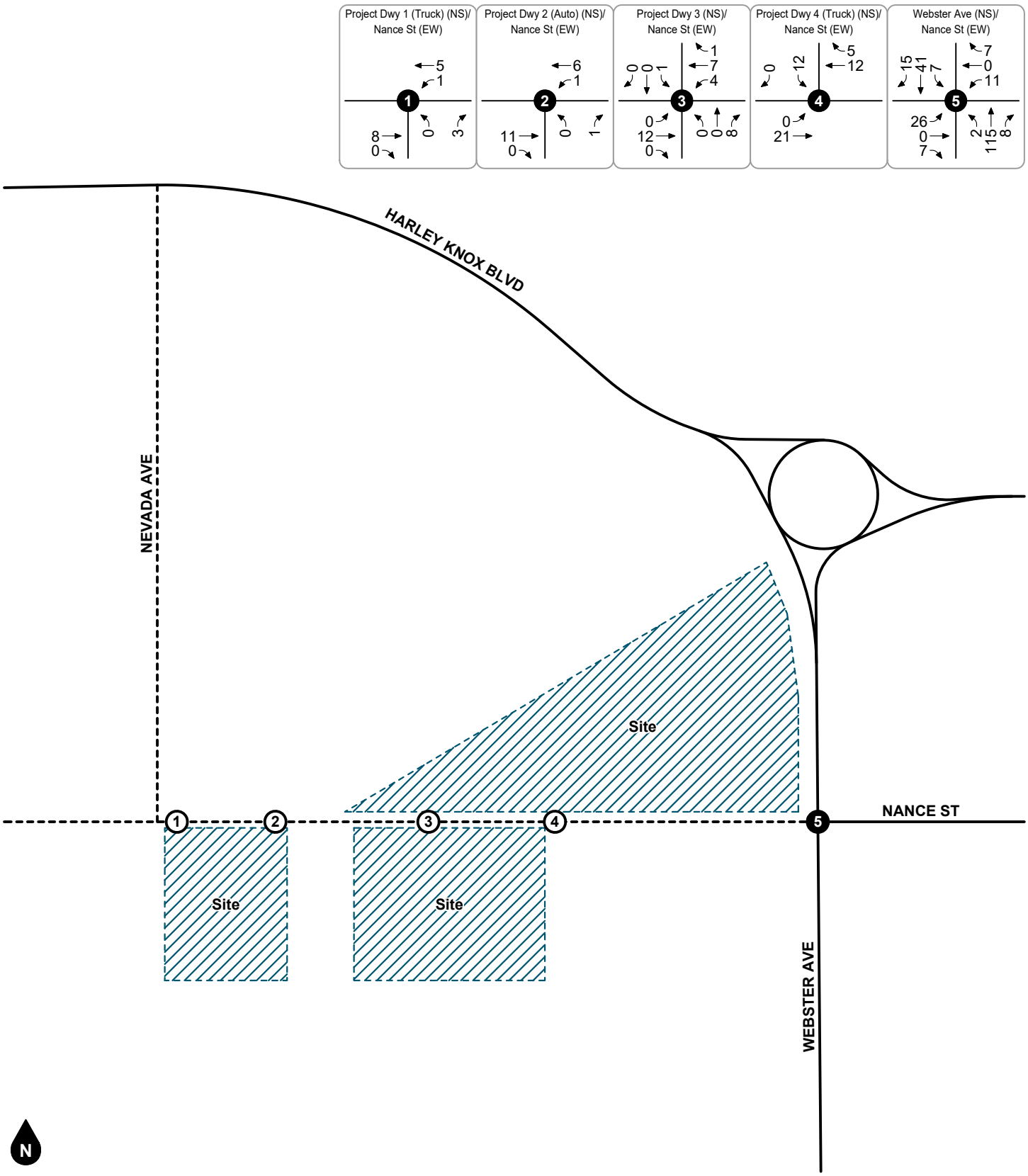


Figure 19
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes

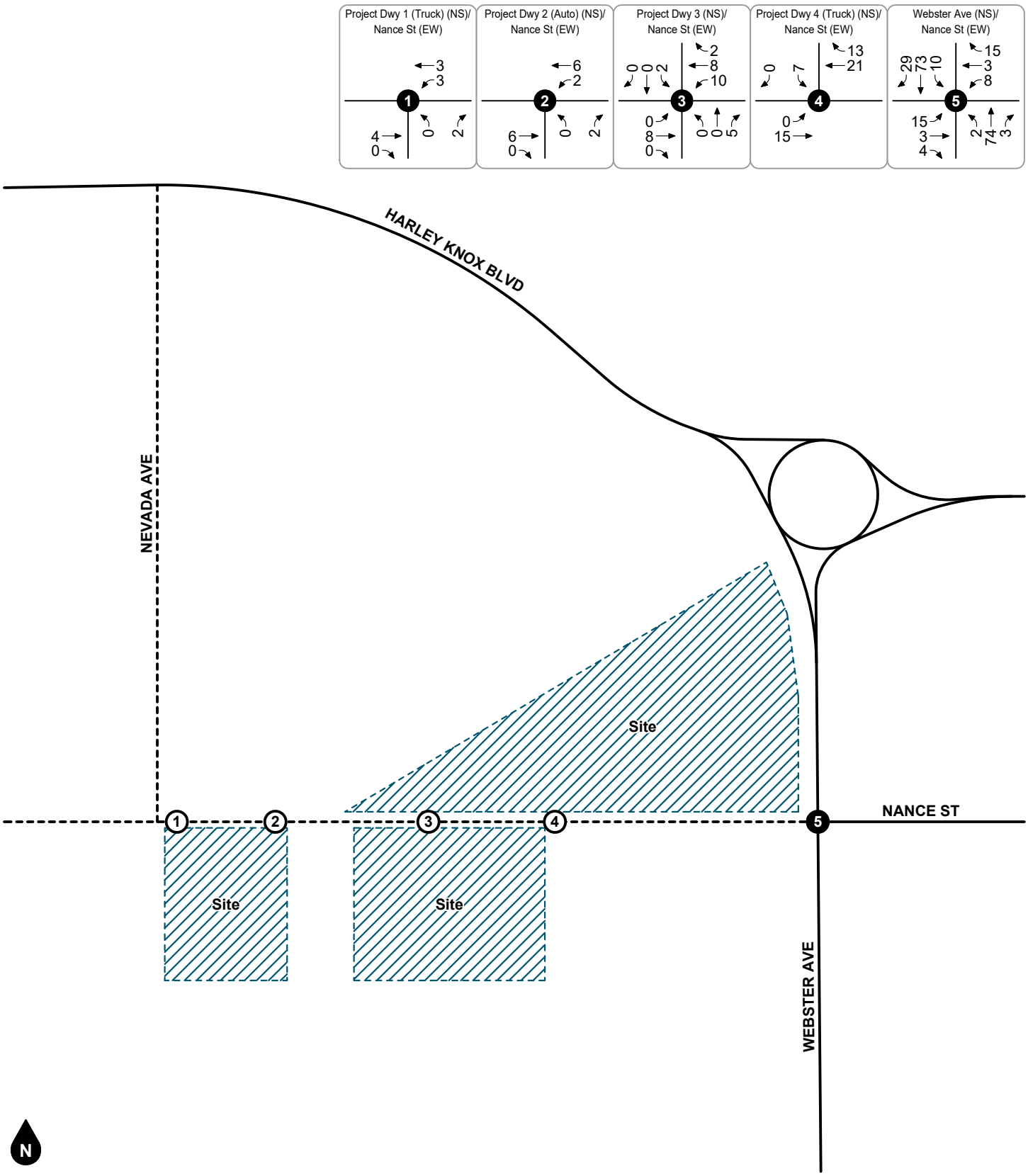
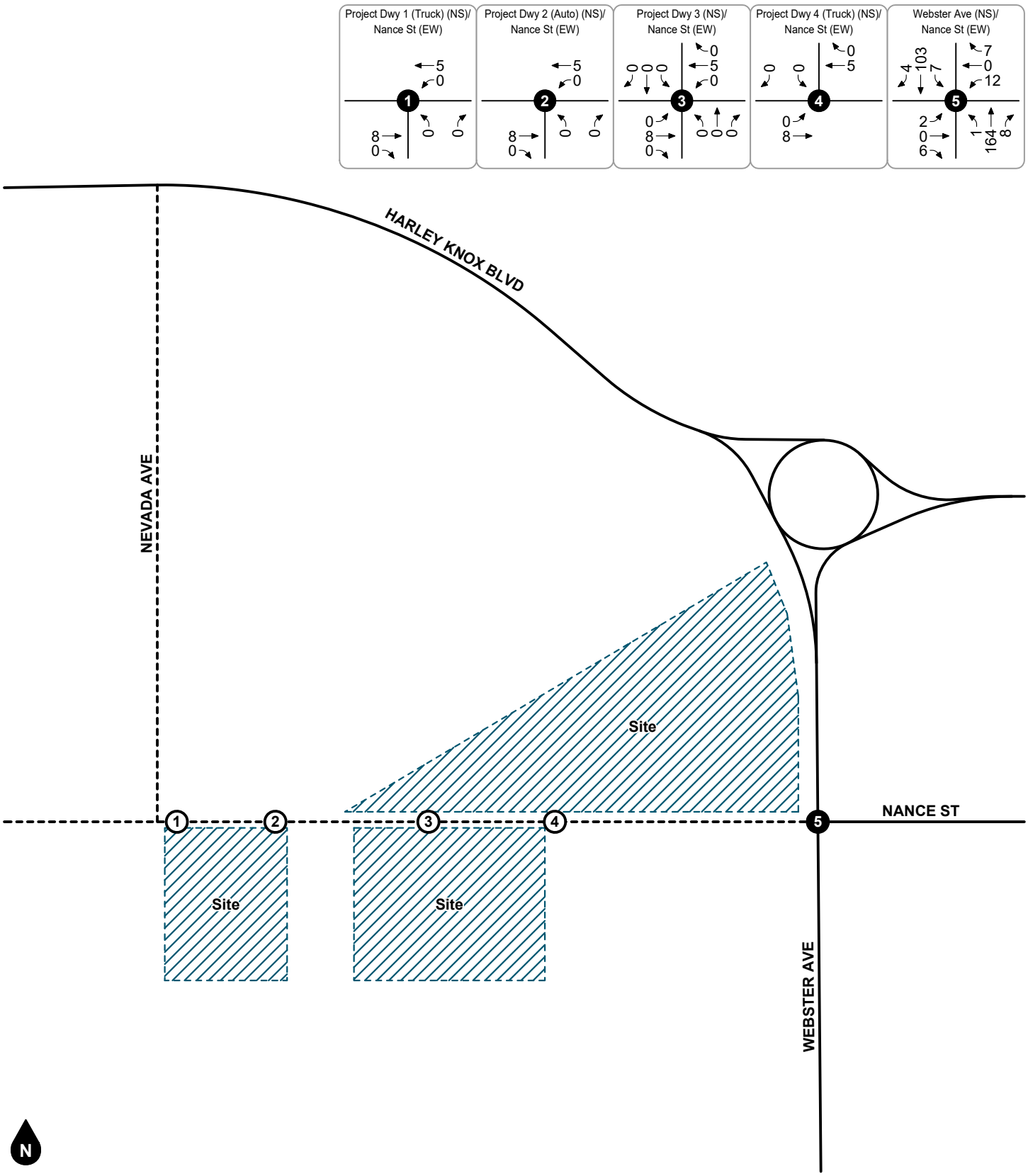


Figure 20
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes

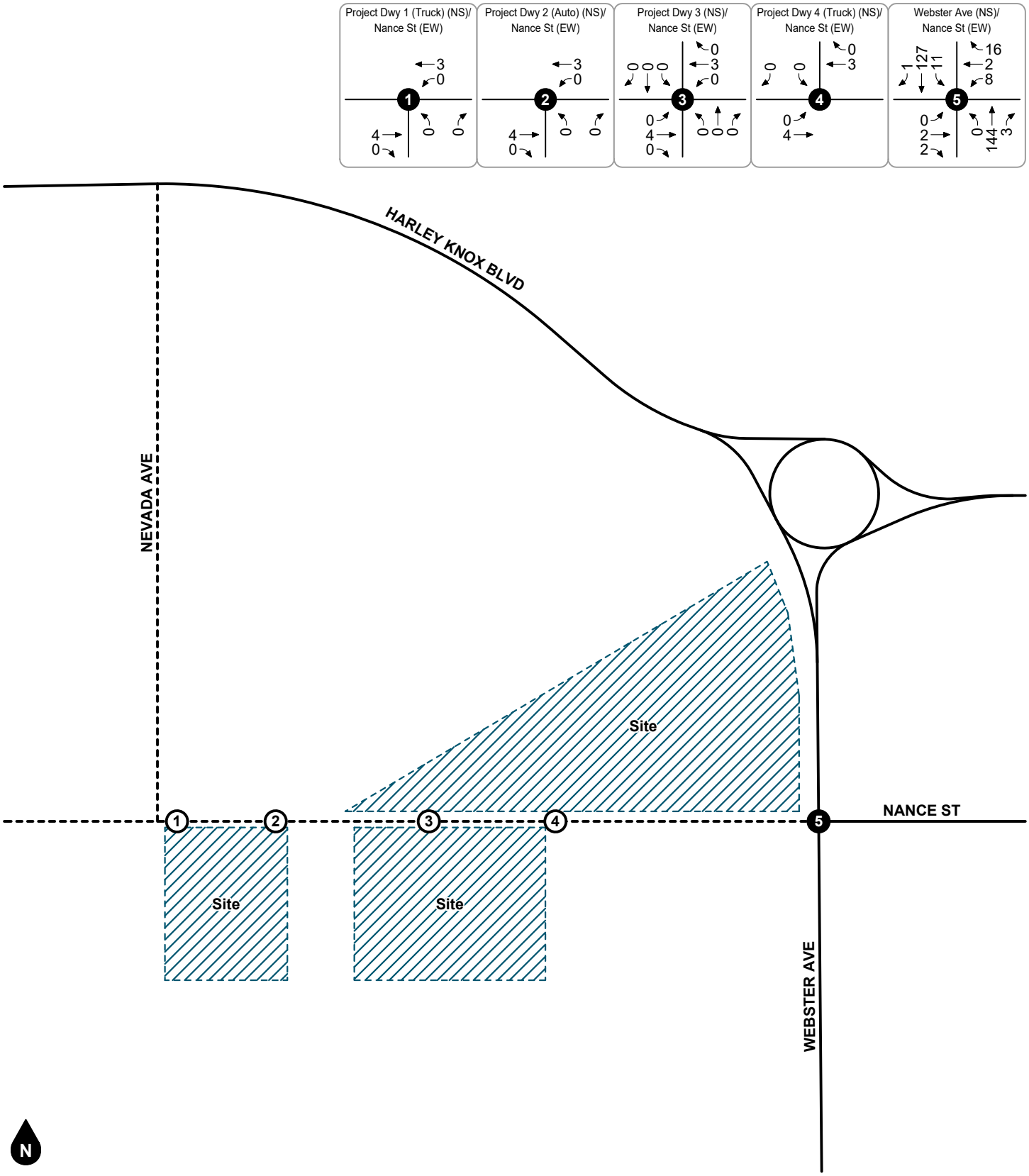


Legend

(#) Study Intersection

(#) Project Driveway

Figure 21
Opening Year (2026) Without Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 22
Opening Year (2026) Without Project
PM Peak Hour Intersection Turning Movement Volumes

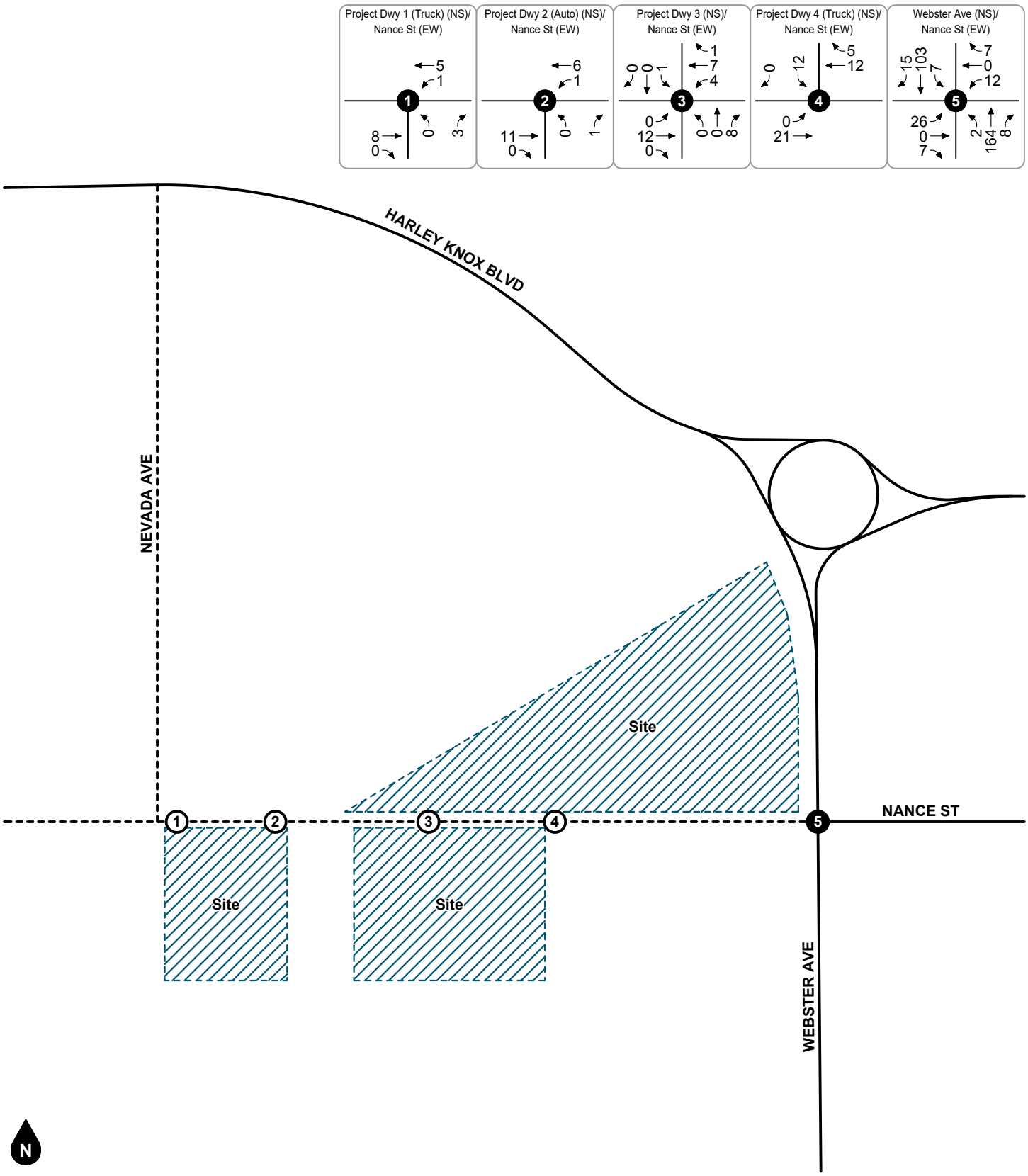


Figure 23
Opening Year (2026) With Project
AM Peak Hour Intersection Turning Movement Volumes

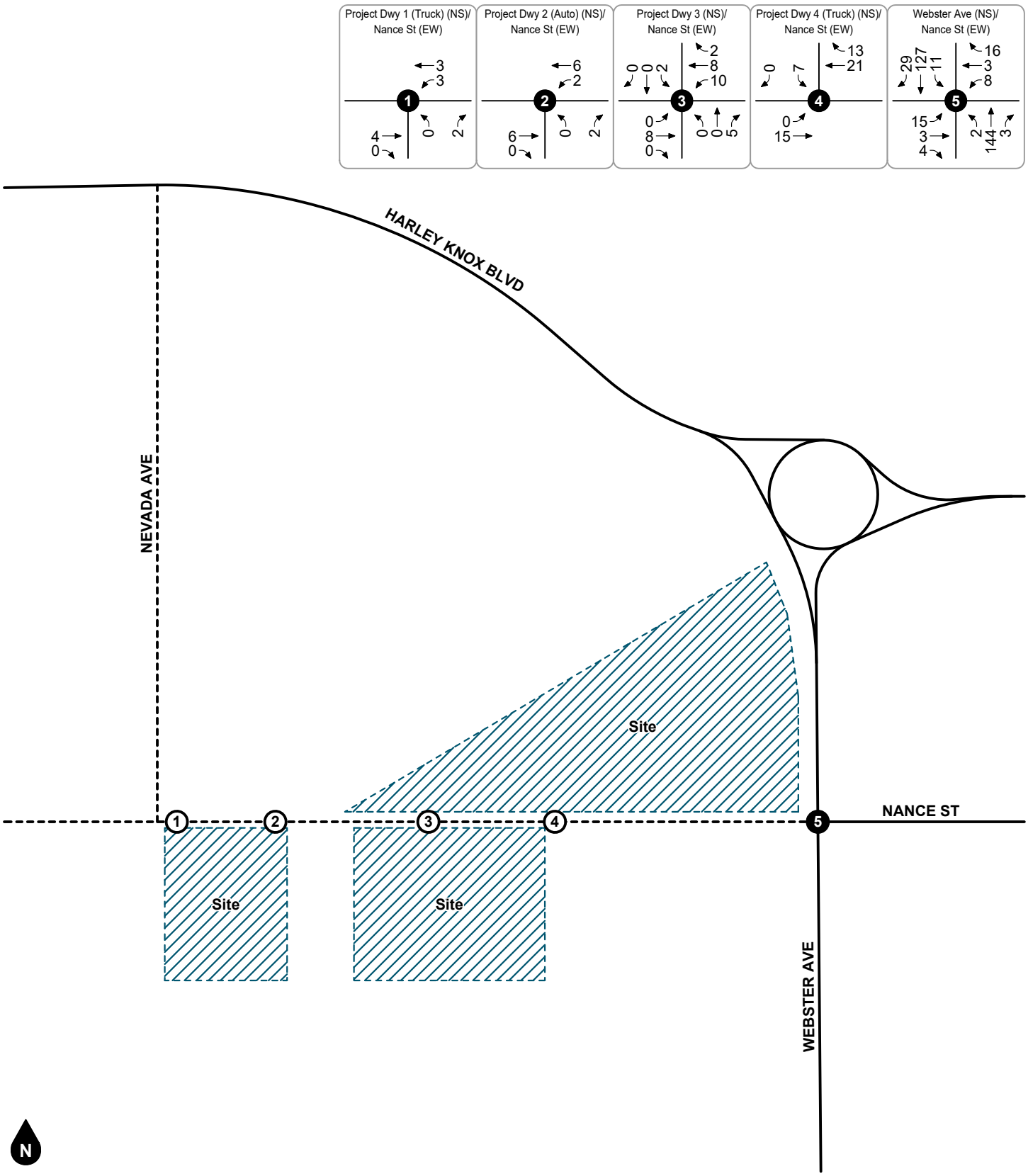


Figure 24
Opening Year (2026) With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE OPERATIONAL ANALYSIS

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix D.

EXISTING PLUS PROJECT

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

OPENING YEAR (2026) WITHOUT PROJECT

The intersection Levels of Service for Opening Year (2026) Without Project conditions are shown in Table 6. As shown in Table 6, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) Without Project conditions.

OPENING YEAR (2026) WITH PROJECT

The intersection Levels of Service for Opening Year (2026) With Project conditions are shown in Table 7. As shown in Table 7, the study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) With Project conditions. Therefore, the proposed project is forecast to result in no substantial operational deficiencies at the study intersections for Opening Year (2026) With Project conditions and no off-site improvements or corrective measures are recommended.

Table 5
Existing Plus Project Intersection Levels of Service

Study Intersection	Traffic Control[1]	Existing				Existing Plus Project				Change in Peak Hour Delay	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	AM	PM
1. Project Dwy 1 (Truck Only) at Nance St	CSS	--	--	--	--	8.3	A	8.3	A	--	--
2. Project Dwy 2 (Auto Only) at Nance St	CSS	--	--	--	--	8.4	A	8.3	A	--	--
3. Project Dwy 3 at Nance St	CSS	--	--	--	--	8.7	A	8.8	A	--	--
4. Project Dwy 4 (Truck Only) at Nance St	CSS	--	--	--	--	8.7	A	8.7	A	--	--
5. Webster Ave at Nance St	TS	4.6	A	5.1	A	6.9	A	6.7	A	+2.3	+1.6

Notes:

(1) CSS = Cross St Stop; TS = Traffic Signal

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross St stop control, LOS is based on average delay of the worst individual approach.

(3) LOS = Level of Service

Table 6
Opening Year (2026) Without Project Intersection Levels of Service

Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
5. Webster Ave at Nance St	TS	3.5	A	3.7	A

Notes:

(1) TS = Traffic Signal

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal, overall average intersection delay and LOS are shown.

(3) LOS = Level of Service

Table 7
Opening Year (2026) With Project Intersection Levels of Service

Study Intersection	Traffic Control[1]	Existing				Existing Plus Project				Change in Peak Hour Delay	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	AM	PM
1. Project Dwy 1 (Truck Only) at Nance St	CSS	--	--	--	--	8.3	A	8.3	A	--	--
2. Project Dwy 2 (Auto Only) at Nance St	CSS	--	--	--	--	8.4	A	8.3	A	--	--
3. Project Dwy 3 at Nance St	CSS	--	--	--	--	8.7	A	8.8	A	--	--
4. Project Dwy 4 (Truck Only) at Nance St	CSS	--	--	--	--	8.7	A	8.7	A	--	--
5. Webster Ave at Nance St	TS	3.5	A	3.7	A	5.2	A	5.0	A	+1.7	+1.3

Notes:

(1) CSS = Cross St Stop; TS = Traffic Signal

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross St stop control, LOS is based on average delay of the worst individual approach.

(3) LOS = Level of Service

7. SITE ACCESS AND CIRCULATION

This section includes a description of project improvements necessary to provide site access.

PROJECT DESIGN FEATURES

This analysis assumes the following improvements will be constructed by the project and adjacent properties to provide project site access, as necessary based on Nance Street classification in the City of Perris General Plan as a Local roadway (60-foot right-of-way):

- Project Driveway 1 (Truck Only) (NS) at Nance Street (EW) [Study Intersection #1]
  - Construct one inbound lane and one outbound lane with northbound stop-control for truck access only
  - Northbound: one shared left/right turn lane
  - Eastbound: one shared through/right turn lane
  - Westbound: one shared left turn/through lane

- Project Driveway 2 (Auto Only) (NS) at Nance Street (EW) [Study Intersection #2]
  - Construct one inbound lane and one outbound lane with northbound stop-control for passenger car access only
  - Northbound: one shared left/right turn lane
  - Eastbound: one shared through/right turn lane
  - Westbound: one shared left turn/through lane

- Project Driveway 3 (NS) at Nance Street (EW) [Study Intersection #3]
  - Construct one inbound lane and one outbound lane with northbound and southbound stop-control
  - Northbound: one shared left/through/right turn lane
  - Southbound: one shared left/through/right turn lane
  - Eastbound: one shared left/through/right turn lane
  - Westbound: one shared left/through/right turn lane

- Project Driveway 4 (Truck Only) (NS) at Nance Street (EW) [Study Intersection #4]
  - Construct one inbound lane and one outbound lane with southbound stop-control for truck access only
  - Southbound: one shared left/right turn lane
  - Eastbound: one shared left turn/through lane
  - Westbound: one shared through/right turn lane

This analysis also assumes the project shall comply with the following or similar conditions as part of the City of Perris standard development review process:

- A construction work site traffic control plan shall comply with State standards set forth in the California Manual of Uniform Traffic Control Devices and shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bike route, or bus stop closures and detours as well as haul routes and hours of operation. All construction related trips shall be restricted to off-peak hours to the extent possible.

- All on-site and off-site roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project shall be constructed in accordance with applicable State/Federal engineering standards to the satisfaction of the City of Perris.

- Site-adjacent roadways shall be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of Perris.

- Adequate emergency vehicle access shall be provided to the satisfaction of the Riverside County Fire Authority.

- The final grading, landscaping, and street improvement plans shall demonstrate that sight distance requirements are met in accordance with applicable City of Perris/California Department of Transportation sight distance standards.

TRAFFIC SIGNAL WARRANT ANALYSIS

Since all study area intersections are forecasted to operate at acceptable Levels of Service, a traffic signal warrant analysis for unsignalized intersections is not necessary. The *California Manual on Uniform Traffic Control Devices* (MUTCD) peak hour traffic signal warrant (Warrant 3) is not met at the project driveways.

GATE STACKING ANALYSIS

Gate stacking at the proposed loading dock access gates was evaluated to ensure adequate storage lengths are provided and vehicle queues do not overflow into the public right-of-way or obstruct on-site circulation.

The gate queueing analysis was performed based on procedures outlined in *Transportation and Land Development* (Institute of Transportation Engineers, 1988). The methodology estimates the number of queued vehicles at a service point based on a Poisson distribution for estimating the effect of surges and random arrivals. Additional inputs include the demand rate, number of service lanes, service rate, and the desired confidence interval. Service rate capacities were based on review of the *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972) methodology; however, the lowest entering maximum hourly capacity is 175 vehicles/hour for a coin operated gate. To provide for a conservative analysis, an entering maximum hourly capacity of 60 vehicles/hour was used; this assumes a truck arrival would take up to one minute for security check-in. A 95 percent confidence interval was used to determine the queue that is not exceeded five times out of 100 intervals.

Table 8 summarizes the loading dock access gate queuing analysis for each truck access driveway on Nance Street based on the project truck trip distribution; detailed worksheets are provided in Appendix E. As shown in Table 8, Project Driveway 1 (Truck Only) at Nance Street (Int. #1) loading dock gate entrances provide approximately 120 feet of storage length, which is sufficient to accommodate the forecast queue length of 75 feet (approximately one truck) during the peak hours.

Project Driveway 3 at Nance Street (Int. #3) loading dock gate entrances provide approximately 68 feet of storage length, which is not sufficient to accommodate the forecast queue length of 75 feet (approximately one truck) during the peak hours. It is projected that the proposed development will have one inbound truck during the AM peak hour and four inbound trucks during the PM peak hour for Project Driveway 3 at Nance Street (Int. #3). Thus, an inbound truck is expected every 15 minutes during the PM peak hour. Since the storage length for the Project Driveway 3 at Nance Street (Int. #3) is less than the length of a 73.5-foot long WB-67 truck, it is recommended that the storage length is either lengthened to a minimum of 75 feet, or the entrance gate remain open during operating hours.

Project Driveway 4 (Truck Only) at Nance Street (Int. #4) loading dock gate entrances provide approximately 80 feet of storage length, which is sufficient to accommodate the forecast queue length of 75 feet (approximately one truck) during the peak hours.

The queuing analysis is performed in vehicle trips assuming 75 feet of queue per vehicle to accommodate a 73.5-foot long WB-67 truck. Therefore, an inbound truck will occupy all available storage length for the project driveways.

Figure 25 shows a stacking diagram for the loading dock access gates at the three project driveways on Nance Street. As shown on Figure 25, the drive aisles provide for sufficient storage to accommodate entering vehicle queues without obstructing vehicles on Nance Street or adversely impacting on-site circulation, except for at Project Driveway 3, where the back end of a full length WB-67 truck may partially protrude into the travel way on Nance Street. Thus, it is recommended that the storage length between Nance Street and the entrance gate at Project Driveway 3 is either lengthened to a minimum of 75 feet, or the entrance gate remain open during operating hours.

TRUCK TURNING TEMPLATES

Truck turning path analysis for trucks entering/exiting the project site driveways on Nance Street are provided on Figure 26 to Figure 28. Based on the truck turning path analysis, the project driveways are expected to adequately accommodate truck turning movements to/from Nance Street

DRIVEWAY SPACING ANALYSIS

The *Perris Valley Commerce Center Amendment No. 12 Specific Plan* (February 2022), Table 4.0-2, states that appropriate driveway spacing for intersections along a Local Road is 200 feet. The distance between project driveways on Nance Street is more than 200 feet except between Project Driveway 1 (Truck Only) and Project Driveway 2 (Auto Only) which is approximately 195 feet, which is approximately five (5) feet less than the 200 feet requirement.

It is noted that Nance Street from Nevada Avenue to Webster Avenue will almost exclusively be utilized by the proposed project for industrial uses. Thus, nearly all trips on the roadway will be project-specific, especially between the project driveways located on the southeast corner of Nevada Avenue and Nance Street. Additionally, in the interest of minimizing potential conflicts between passenger cars and trucks, the proposed layout maximizes the driveway spacing within the available frontage while providing two separate access driveways for passenger cars and trucks, thus providing an optimal balance between competing design criteria. For these reasons, it is reasonable that an exception be applied for these driveways to be less than the 200 feet requirement by only five (5) feet.

The *Perris Valley Commerce Center Amendment No. 12 Specific Plan* (February 2022), states that the intended functions of the facility in regard to vehicular access and on-site safety (including driveway spacing) begin with "safe, definable site access that creates a sense of arrival". Thus, for the reasons specified above, the project meets the intent of the *Perris Valley Commerce Center Amendment No. 12 Specific Plan* (February 2022), even though the distance between Project Driveway 1 and Project Driveway 2 is 5 feet less than the 200 feet requirement.

PROJECT DRIVEWAY ANALYSIS

The Project Driveway 1 (Truck Only) at Nance Street (Int. #1) is slightly offset from the Nevada Avenue centerline to the north; however, Nevada Avenue has been vacated south of Nance Street. Ultimate buildout will consist of a stop-controlled "L" intersection between southbound Nevada Avenue and westbound Nance Street. Project volumes are not forecast to exceed two to three PCE trips entering or exiting Project Driveway 1 during the AM or PM peak hours. Based on the stop-controlled, two-legged intersection of Nevada Avenue/Nance Street and the negligible project-related volume, it is reasonable that an exception be applied to Perris Valley Commerce Center Specific Plan requirements.

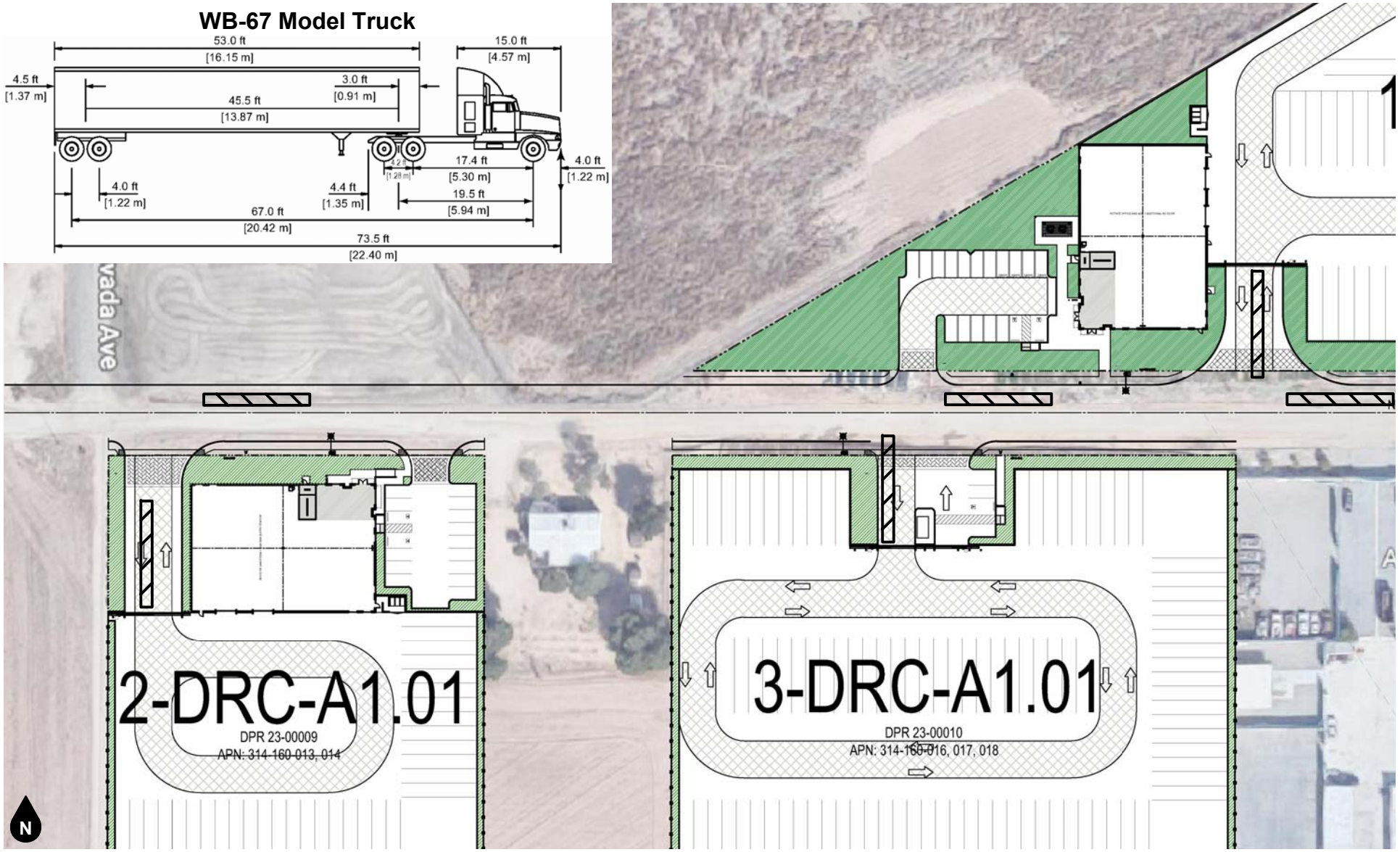
The driveway for Project Driveway 3 at Nance Street (Int. #2) is a single driveway for both trucks and autos. This parcel does not include any buildings and as such passenger car traffic would be minimal. There are four passenger car vehicle parking spaces available upon entering the driveway prior to entering the storage yard. Since there is no operational building structure on this property, any automobile access usage will be minimal as the property will functionally be truck storage only. Since the driveway will have negligible automobile usage, it is reasonable that an exception be applied to Perris Valley Commerce Center Specific Plan requirements.

Table 8
Parking Gate Access Stacking Analysis

Gate / Peak Hour	Demand Flow (veh/hr)	Service Lanes	Service Rate Capacity (veh/hr/ln)	Utilization Factor	Queue Length (feet)	Storage Length (feet)	Adequate Storage Provided
Entering							
Project Driveway 1 (Truck Only)							
AM Peak Hour	1	1	60	0.02	75	120	YES
PM Peak Hour	1	1	60	0.02	75	120	YES
Project Driveway 3							
AM Peak Hour	1	1	60	0.02	75	68	No
PM Peak Hour	4	1	60	0.07	75	68	No
Project Driveway 4 (Truck Only)							
AM Peak Hour	2	1	60	0.03	75	80	YES
PM Peak Hour	6	1	60	0.10	75	80	YES

Notes:

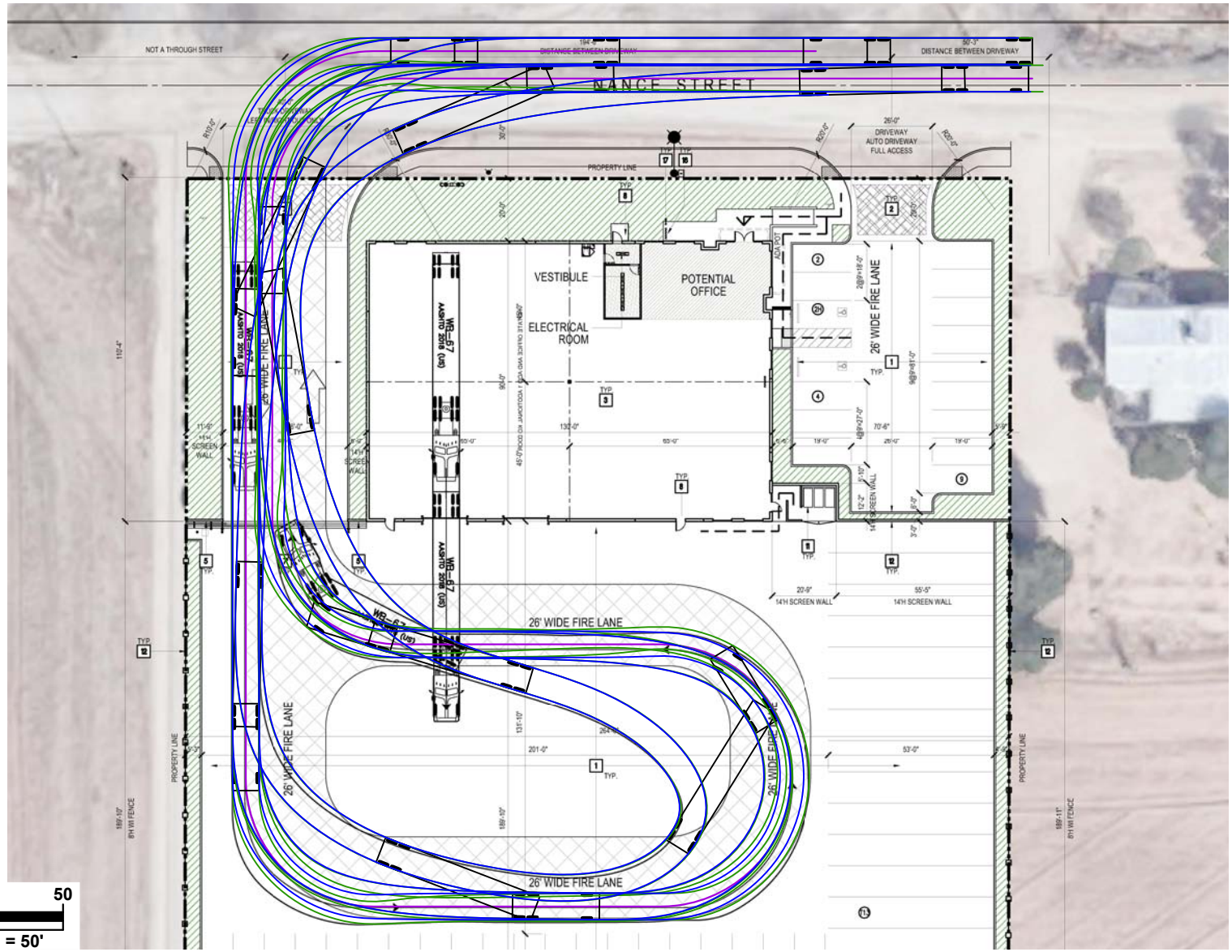
(1) Based on Transportation and Land Development (Institute of Transportation Engineers, 1988) "Applications of Queuing Analysis" methodology with service rate capacities from *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972); see Attachment A.



Legend

Queued Semi-Truck Stacking

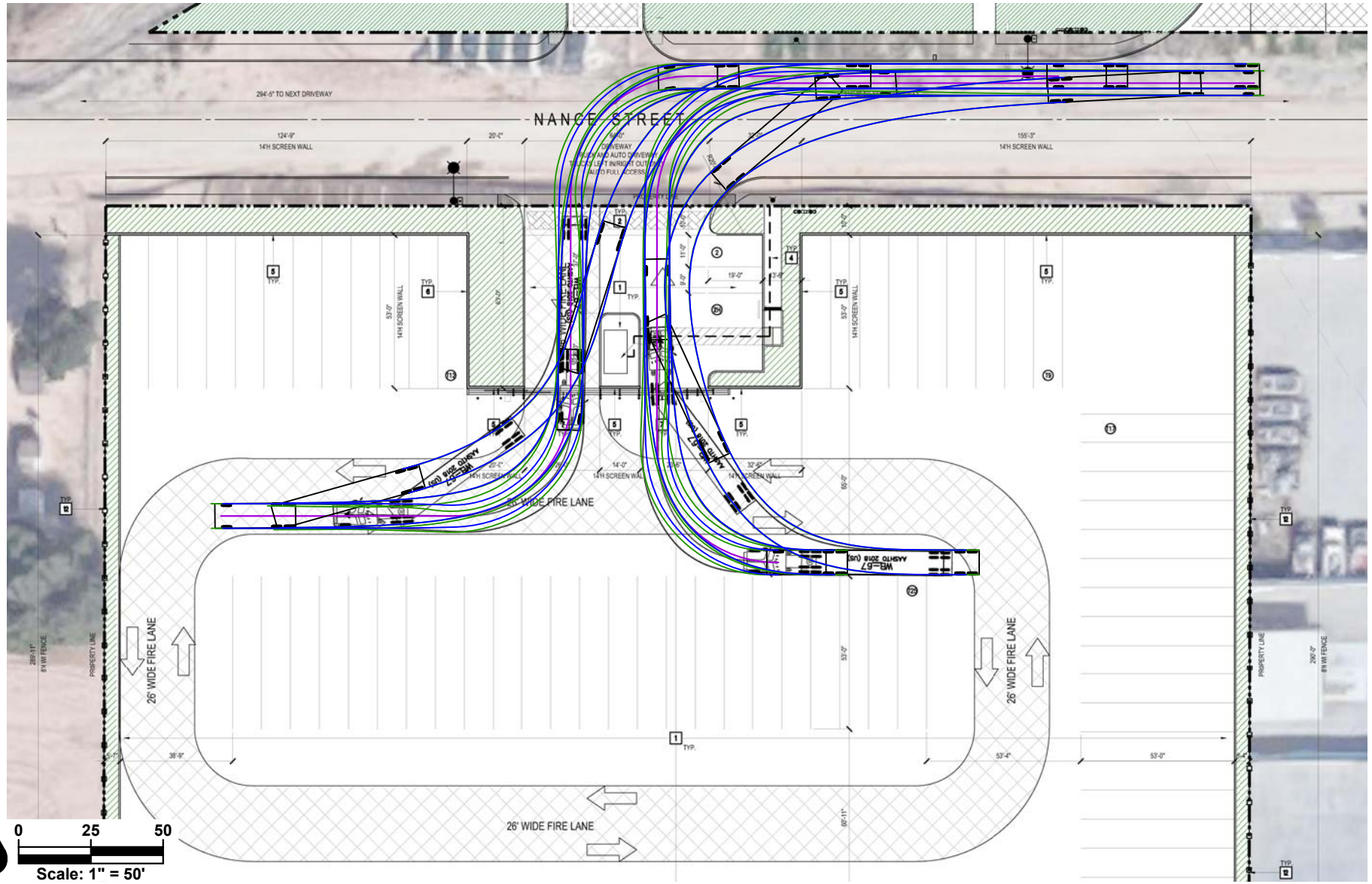
Figure 25
Gate Access Stacking Diagram



Legend

- Vehicle Wheel Path
- Vehicle Overhang
- Vehicle Centerline

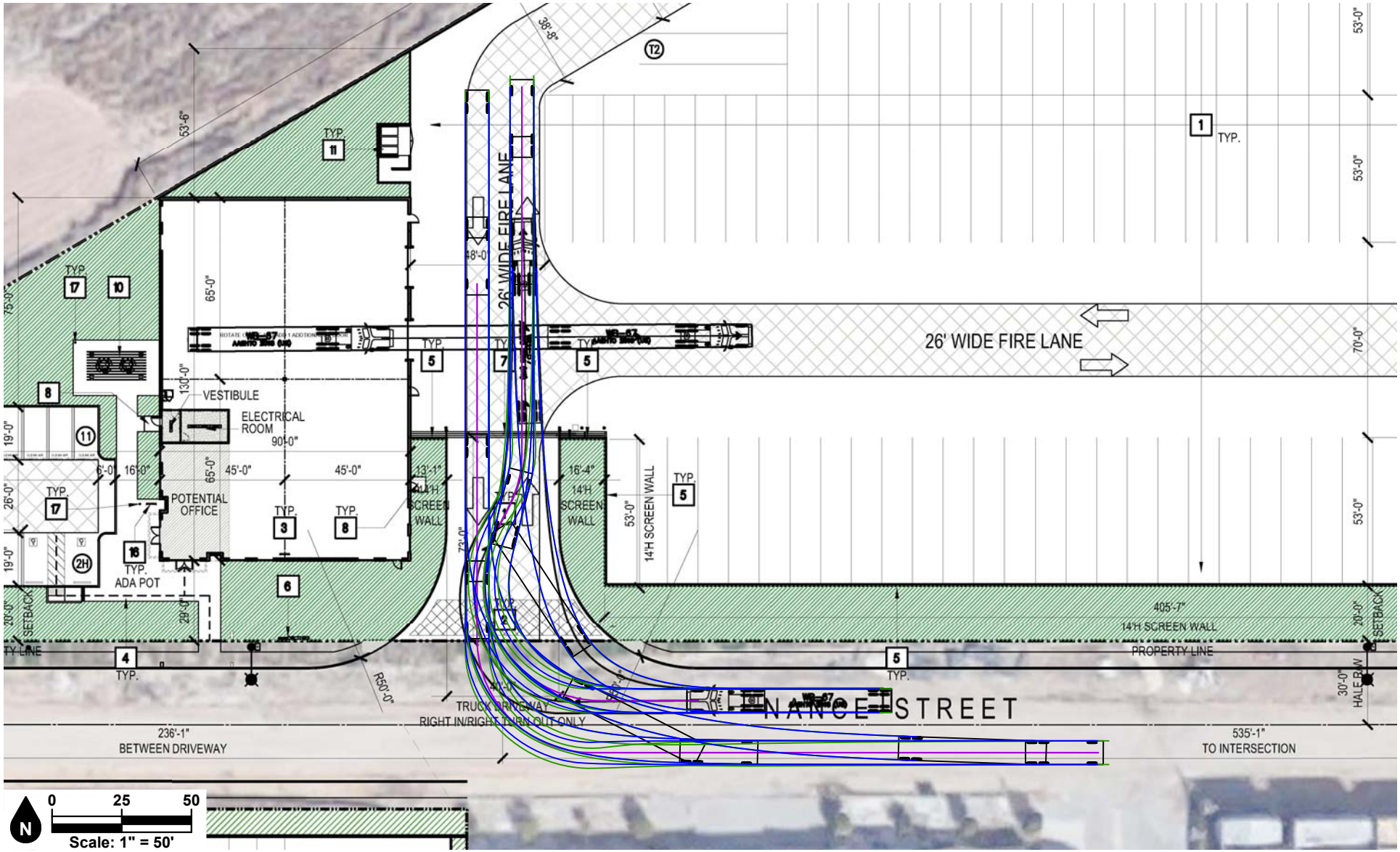
Figure 26
Project Driveway 1 (Truck Only) Truck Turning Paths



Legend

- Vehicle Wheel Path
- Vehicle Overhang
- Vehicle Centerline

Figure 27
Project Driveway 3 Truck Turning Paths



Legend

- Vehicle Wheel Path
- Vehicle Overhang
- Vehicle Centerline

Figure 28
Project Driveway 4 (Truck Only) Truck Turning Paths

8. VEHICLES MILES TRAVELED (VMT)

BACKGROUND

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. All agencies and projects State-wide are required to utilize the updated CEQA guidelines recommending use of VMT for evaluating transportation impacts as of July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (State of California, December 2018) ["OPR Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

VMT ASSESSMENT AND SCREENING

The project VMT impact has been assessed in accordance with guidance from the *City of Perris Transportation Impact Analysis Guidelines for CEQA* (May 12, 2020) ["the City TIA Guidelines"]. The transportation guidelines provide a framework for "screening thresholds" for certain projects that are expected to cause a less than significant impact without conducting a detailed VMT study.

The project requirements for evaluation of transportation impacts under CEQA was assessed using the City of Perris VMT Scoping Form for Land Use Projects as appended to the City of Perris TIA Guidelines and included in Appendix B of this letter. As documented in the VMT Scoping Form, the proposed project satisfies the following VMT screening criteria:

A.	Is the project 100% affordable housing?	No
B.	Is the project within half mile of qualifying transit?	No
C.	Is the project a local serving land use?	No
D.	Is the project in a low VMT area?	No
E.	Are the project's net daily trips less than 500 ADT?	Yes

Therefore, the proposed project is presumed to have a less than significant impact on VMT since it satisfies one or more of the VMT screening criteria established by the City of Perris (the project site is forecast to generate fewer than 500 daily vehicle trips). No additional VMT modeling or mitigation measures are required.

9. CONCLUSIONS

This section summarizes the findings and recommended improvements, or mitigation measures (if any) identified in previous sections of this study.

PROJECT TRIP GENERATION

The proposed project is forecast to generate 419 daily vehicle trips, including 17 vehicle trips during the AM peak hour and 27 vehicle trips during the PM peak hour. The proposed project is forecast to generate approximately 851 daily PCE trips, including 35 PCE trips during the AM peak hour and 51 PCE trips during the PM peak hour.

LEVELS OF SERVICE/OPERATIONAL ANALYSIS FINDINGS (NON-CEQA)

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

The study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) With Project conditions. Therefore, the proposed project is forecast to result in no substantial operational deficiencies at the study intersections for Opening Year (2026) With Project conditions and no off-site improvements or corrective measures are recommended.

GATE STACKING ANALYSIS FINDINGS

The drive aisles provide for sufficient storage to accommodate entering vehicle queues without obstructing vehicles on Nance Street or adversely impacting on-site circulation, except for at Project Driveway 3. Thus, it is recommended that the storage length is either lengthened to a minimum of 75 feet, or the entrance gates at the project driveways remain open during operating hours.

TRUCK TURNING PATH ANALYSIS FINDINGS

Based on the truck turning path analysis, the project driveways are expected to adequately accommodate truck turning movements to/from Nance Street.

VMT ANALYSIS FINDINGS (CEQA)

The proposed project is presumed to have a less than significant impact on VMT since it satisfies one or more of the VMT screening criteria established by the City of Perris (the project site is forecast to generate fewer than 500 daily vehicle trips). No additional VMT modeling or mitigation measures are required.

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Volume Count Worksheets
Appendix D Level of Service Worksheets
Appendix E Gate Stacking Worksheets

APPENDIX A

GLOSSARY

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
GFA	Gross Floor Area
LOS	Level of Service
PCE	Passenger Car Equivalent
SP	Service Population
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

ACTUATED SIGNAL CONTROL: A type of traffic signal control in which display of each phase depends on whether the corresponding phase detector has registered a service call or the phase is on recall.

ACTUATION: Detection of a roadway user that is forwarded to the signal controller.

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

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

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

CALL: An indication within a signal controller that a particular phase is waiting for service, either through actuation from a roadway user or phase recall.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass through a roadway facility during a specified period.

CHANNELIZATION: The separation of conflicting traffic movements by use of pavement markings, raised curbs, or other suitable means to facilitate free flow movement.

CLEARANCE INTERVAL: Equal to the yellow plus all-red time, if any, when a traffic signal changes between phases (i.e., the amount of time between the end of a green light from one movement to the beginning of a green light for the next).

COORDINATED SIGNAL CONTROL: A type of traffic signal control in which non-coordinated phases associated with minor movements are constrained such that the coordinated phases are served at a specific time during the signal cycle, thus maintaining the efficient progression of traffic flow along the major roadway.

CONTROL DELAY: The portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign). It includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay.

CORDON: An imaginary boundary line around or across a study area across which vehicles, persons, or other information can be collected for survey and analytical purposes.

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic traveling at a given speed to radically alter their speed or trajectory.

CYCLE: A complete sequence of signal indications for all phases.

CYCLE LENGTH: The total time for a traffic signal to complete one full cycle.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The total additional travel time experienced by a roadway user (driver, passenger, bicyclist, or pedestrian) beyond that required to travel at a desired speed.

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

DETECTOR: A device used to count or determine the presence of a roadway user.

DESIGN SPEED: A speed used for purposes of designing horizontal and vertical alignments of a highway.

DIRECTIONAL SPLIT: The percent of two-way traffic traveling in a specified direction.

DIVERSION: The rerouting of traffic from a normal path of travel between two points, such as to avoid congestion or perform a secondary trip.

FREE FLOW: Traffic flow that is unaffected by a traffic control and/or or upstream or downstream conditions.

GAP: Time or distance between two vehicles measured from rear bumper of the front vehicle to front bumper of the second vehicle.

GAP ACCEPTANCE: The method by which a driver accepts an available gap in traffic to enter or cross the road.

HEADWAY: Time or distance between two successive vehicles measured from same point on both vehicles (i.e., front bumper to front bumper).

LEVEL OF SERVICE: A grading scale of quantitative performance measures representing the quality of service of a transportation facility or service from an average traveler's perspective.

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

MULTI-MODAL: More than one mode, such as automobile, transit, bicycle, and pedestrian.

OFFSET: The time interval between the beginning of a traffic signal cycle at one intersection and the beginning of signal cycle an adjacent intersection.

PLATOON: A set of vehicles traveling at similar speed and moving as a general group with clear separation between other vehicles ahead and behind.

PASSENGER CAR EQUIVALENT: A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEDESTRIAN CLEARANCE INTERVAL: Also known as the "Flashing Don't Walk" interval, it signals the end of pedestrian entry into the crosswalk following the "Walk" indication and provides time for pedestrians who have already entered the crosswalk to finishing crossing.

PEAK HOUR: The hour within a day in which the maximum volume occurs.

PEAK HOUR FACTOR: The peak hour volume divided by the four times the peak 15-minute flow rate. This

PHASE: In traffic signals, the green, yellow, and red clearance intervals assigned to a specified traffic movement.

PRETIMED SIGNAL: A traffic signal operation in which the cycle length, phasing sequence, and phasing times are predetermined and fixed, regardless of actual demand for any given traffic movement. Also known as a fixed time signal.

PROGRESSION: The coordinated movement of vehicles through signalized intersections along a corridor.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

RECALL: A signal phasing operation in which a specified phase places a call to the signal controller each time a conflicting phase is served, thus ensuring the specified phase will be serviced again.

SEMI-ACTUATED CONTROL: A type of traffic signal control in which only the minor movements are provided detection.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queuing to occur.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle traveling at a given speed to bring the vehicle to a stop after an object on the road becomes visible, including reaction and response time.

TRIP OR TRIP END: The one-directional movement of a person or vehicle. Every trip has an origin and a destination at its respective ends (i.e., trip ends). In terms of site trip generation, the same vehicle entering and exiting a site generates two trips: one inbound trip and one outbound trip.

TRIP GENERATION RATE: The rate at which a land use generates trips per the specified land use variable, such per dwelling unit or per thousand square feet.

TRUCK: A heavy motor vehicle generally used for transporting goods.

VEHICLE MILES TRAVELED: A measure of the amount and distance of automobile travel essentially calculated as the sum of each trip times the trip length.

APPENDIX B

SCOPING AGREEMENT

MEMORANDUM OF UNDERSTANDING

TO: John Pourkazemi, Tri Lake Consultants, Inc. | CITY OF PERRIS

FROM: Bryan Crawford, Senior Transportation Planner | GANDDINI GROUP, INC.

DATE: October 9, 2023

SUBJECT: Nance Street Trailer Yard (DPR 22-00022, DPR 23-00009, and DPR 23-00010) Traffic Impact Analysis Scoping

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The purpose of this traffic study scoping document is to outline the proposed traffic analysis parameters and assumptions for review/concurrence by City of Perris staff.

PROJECT DESCRIPTION

The project site is located west of Webster Street on both sides of Nance Street in the City of Perris, California on three non-contiguous sites totaling 9.73 acres. The project site is currently vacant. The project APN's are 314-153-058, 060, 062, 066, 070, and 082, and 314-160-013, 014, 016, 017, and 018. The project location map is shown on Figure 1.

The proposed project involves construction of a truck trailer yard consisting of 262 trailer parking spaces, 38 passenger car parking spaces, two 9,900 square foot mechanic bays totaling 19,800 square feet, and two 1,800 square foot office buildings totaling 3,600 square feet. The project proposes one full access driveway for trucks and one full access driveway for passenger cars on the portion of the project site north of Nance Street, one full access driveway for trucks and one full access driveway for passenger cars on the western portion of the project site south of Nance Street, and one full access driveway for trucks and passenger cars on the eastern portion of the project site south of Nance Street. The proposed site plan is shown in Figure 2.

VMT SCOPING FORM

Attachment A shows the City of Perris VMT Scoping Form for Land Use Project based on the City of Perris TIA Guidelines, dated May 12, 2020. The project is presumed to have a less than significant impact on VMT because the project satisfies at least one (1) of the VMT screening criteria. As shown in Attachment A, the project satisfies VMT screening criteria E because the project is forecast to generate fewer than 500 daily vehicle trips.

PROJECT TRIP GENERATION

Table 1 shows a summary of the observed trips and average rates based on trip generation surveys conducted at other outdoor trailer storage facilities in Southern California. Trip count worksheets for the following survey locations are provided in Attachment B:

1. 1691 South Auto Center Road, San Bernardino, CA (November 30, 2016);
2. 5087 Patterson Avenue, Perris, CA (January 23, 2019); and
3. 1935 5th Street, San Bernardino, CA (February 8, 2022).

These three outdoor trailer storage facilities were chosen for analysis as they are located in the Inland Empire, were previously approved and chosen for representative outdoor trailer storage yard facilities for prior traffic analysis, include office buildings and mechanic bays similar to the project site, and have on-site trailer parking space density comparative to the overall project site acreage similar to the project site.

Table 2 shows the project trip generation forecast based on the average trip generation rates derived from the survey locations noted above. As shown in Table 2, the proposed project is forecast to generate 419 daily vehicle trips, including 17 vehicle trips during the AM peak hour and 27 vehicle trips during the PM peak hour.

In accordance with industry practice for truck-oriented uses, the project trip generation was also calculated in terms of Passenger Car Equivalent (PCE) trips based on a PCE factor of 2.0 for heavy trucks (2 & 3-axle) and a PCE factor of 3.0 for heavy trucks (4+-axle). As also shown in Table 2, this equates to 851 daily PCE trips, including 35 PCE trips during the AM peak hour and 51 PCE trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION

Figure 3 and Figure 4 illustrate the forecast directional distribution patterns of project-generated passenger car and truck trips based on review of the existing local and regional roadway facilities in the project vicinity and surrounding land uses. Figure 5 and Figure 6 illustrate the project generated AM and PM peak hour trips in PCE's allocated to the study area intersections.

The passenger car and truck trip percentages to/from each project driveway was determined based on the number of parking spaces allocated for passenger cars and truck trailer storage in each parcel compared to the cumulative amount of passenger car and truck trailer storage parking spaces for the entire site.

Nance Street from Nevada Avenue to Webster Avenue will be constructed to provide site access for both passenger cars and trucks. There are currently no plans to extend Nevada Avenue from Harley Knox Boulevard to Nance Street. Construction of Nevada Avenue from Harley Knox Boulevard to Nevada Avenue will be contingent on property owners adjacent to Nevada Avenue constructing development on their properties.

STUDY AREA

According to the *City of Perris Transportation Impact Analysis Guidelines for CEQA* (May 12, 2020) ["the *City VMT Guidelines*"], a TIS (Traffic Impact Study) for LOS (Level of Service) evaluation is required for projects which exceed 500 daily trips or 50 peak hour trip for project approval purposes. The project is anticipated to generate more than 500 daily PCE trips and contribute more than 50 PCE peak hour trips at the adjacent intersection of Webster Avenue and Nance Street; therefore, a focused traffic analysis is required.

Intersections identified for analysis typically include classified intersections (Collector-to-Collector or higher) at which a project is forecast to contribute 50 or more trips during the AM or PM peak hours.

Study Intersections (Figure 1)

1. Project Driveway 1 (Truck Only) (NS) at Nance Street (EW)
2. Project Driveway 2 (Auto Only) (NS) at Nance Street (EW)
3. Project Driveway 3 (NS) at Nance Street (EW)
4. Project Driveway 4 (Truck Only) (NS) at Nance Street (EW)
5. Webster Avenue (NS) at Nance Street (EW)

TRAFFIC COUNTS

New intersection turning movement counts separating cars and trucks by axle will be obtained and used at the study intersections during the AM peak period (7:00 AM – 9:00 AM) and the PM peak period (4:00 PM – 6:00 PM) on a typical weekday (Tuesday, Wednesday, or Thursday) when schools are in session.

ANALYSIS SCENARIOS

The traffic study shall evaluate the following analysis scenarios for weekday AM and PM peak hour conditions:

- Existing [2023]
- Existing Plus Project [2023]
- Opening Year Without Project [2025]
- Opening Year With Project [2025]

FORECASTING METHODOLOGY

Ambient Growth Rate

To account for area-wide ambient growth, the Opening Year 2025 will include a 3% annual growth for 2 years (total growth factor = 1.06) over the 2023 base volumes. The 3% annual growth rate is consistent to other traffic studies conducted in the area.

Other Cumulative Projects

A list of pending and approved cumulative development projects will be obtained from the City of Perris and City of Moreno Valley. This list will be narrowed down to include projects within a 1.5-mile radius of the project site.

Trip forecasts for other development projects within the project study area will be determined based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021) and will be added to existing roadway volumes for the applicable analysis scenarios.

GATE STACKING ANALYSIS

A gate stacking analysis will be performed for inbound truck access at gated entries to ensure adequate spacing is provided on-site and truck queues do not overflow into the public right-of-way.

TRUCK TURNING PATH ANALYSIS

A truck turning path analysis will be performed for the inbound/outbound truck turning movements along Nance Street. On-site truck path circulation will also be shown within the analysis.

PVCCSP DRIVEWAY SPACING ANALYSIS

The proposed project does not meet the PVCCSP driveway spacing requirements on Nance Street. This will be addressed in the traffic impact analysis.

PROJECT DRIVEWAY ANALYSIS

The traffic impact analysis will include a driveway analysis specifically addressing the following:

- The westerly driveway for 2-DRC-A1.01 (Intersection #1) is slightly offset from the Nevada Avenue intersection to the north. The project west boundary is the centerline of where the south leg of the Nevada Avenue intersection would be. This conflict with PVCCSP spacing requirements will be addressed in the traffic impact analysis.

- The driveway for 3-DRC-A-1.01 (Intersection #3) is a single driveway for both trucks and autos. This parcel does not include any buildings and as such passenger car traffic would be minimal. There are four passenger car vehicle parking spaces available upon entering the driveway prior to entering the storage yard. This will be addressed further in the traffic impact analysis.

CONCLUSION

We appreciate the opportunity to provide this scoping document for your review. Should you have any questions or comments regarding the proposed scope, please contact Bryan Crawford at (714) 795-3100 x 104 or bryan@ganddini.com.

Table 1
Summary of Trip Generation Surveys Conducted at Other Outdoor Trailer Storage Facilities

Vehicle Type	Quantity[1]	Observed Trip Generation[2]						
		AM Peak Hour			PM Peak Hour			
		In	Out	Total	In	Out	Total	Daily
Survey Site 1 (1691 Auto Center) [a]								
Trips:								
Passenger Car	12.74 AC	4	1	5	5	12	17	185
Trucks (2 & 3-Axle)	12.74 AC	0	5	5	11	3	14	172
Trucks (4+ Axle)	12.74 AC	3	3	6	2	0	2	146
Total		*7*	*9*	*16*	*18*	*15*	*33*	*503*
Rates:								
Passenger Car	per AC	0.314	0.078	0.392	0.392	0.942	1.334	14.521
Trucks (2 & 3-Axle)	per AC	0.000	0.392	0.392	0.863	0.235	1.098	13.501
Trucks (4+ Axle)	per AC	0.235	0.235	0.470	0.157	0.000	0.157	11.460
Total		*0.549*	*0.705*	*1.254*	*1.412*	*1.177*	*2.589*	*39.482*
Survey Site 2 (5087 Patterson Ave) [b]								
Trips:								
Passenger Car	4.50 AC	0	2	2	1	1	2	38
Trucks (2 & 3-Axle)	4.50 AC	1	5	6	4	0	4	73
Trucks (4+ Axle)	4.50 AC	1	0	1	0	3	3	57
Total		*2*	*7*	*9*	*5*	*4*	*9*	*168*
Rates:								
Passenger Car	per AC	0.000	0.444	0.444	0.222	0.222	0.444	8.444
Trucks (2 & 3-Axle)	per AC	0.222	1.111	1.333	0.889	0.000	0.889	16.222
Trucks (4+ Axle)	per AC	0.222	0.000	0.222	0.000	0.667	0.667	12.667
Total		*0.444*	*1.555*	*1.999*	*1.111*	*0.889*	*2*	*37.333*
Survey Site 3 (1935 5th St) [c]								
Trips:								
Passenger Car	5.79 AC	1	1	2	4	3	7	99
Trucks (2 & 3-Axle)	5.79 AC	2	3	5	3	3	6	89
Trucks (4+ Axle)	5.79 AC	1	4	5	7	1	8	115
Total		*4*	*8*	*12*	*14*	*7*	*21*	*303*
Rates:								
Passenger Car	per AC	0.173	0.173	0.346	0.691	0.518	1.209	17.098
Trucks (2 & 3-Axle)	per AC	0.345	0.518	0.863	0.518	0.518	1.036	15.371
Trucks (4+ Axle)	per AC	0.173	0.691	0.864	1.209	0.173	1.382	19.862
Total		*0.691*	*1.382*	*2.073*	*2.418*	*1.209*	*3.627*	*52.331*
AVERAGE RATES								
Passenger Car Trips	per AC	0.162	0.232	0.394	0.435	0.561	0.996	13.354
Trucks (2 & 3-Axle)	per AC	0.189	0.674	0.863	0.757	0.251	1.008	15.031
Trucks (4+ Axle)	per AC	0.210	0.309	0.519	0.455	0.280	0.735	14.663
Total		*0.561*	*1.214*	*1.775*	*1.647*	*1.092*	*2.739*	*43.049*

Notes:
1. AC = Acre(s)

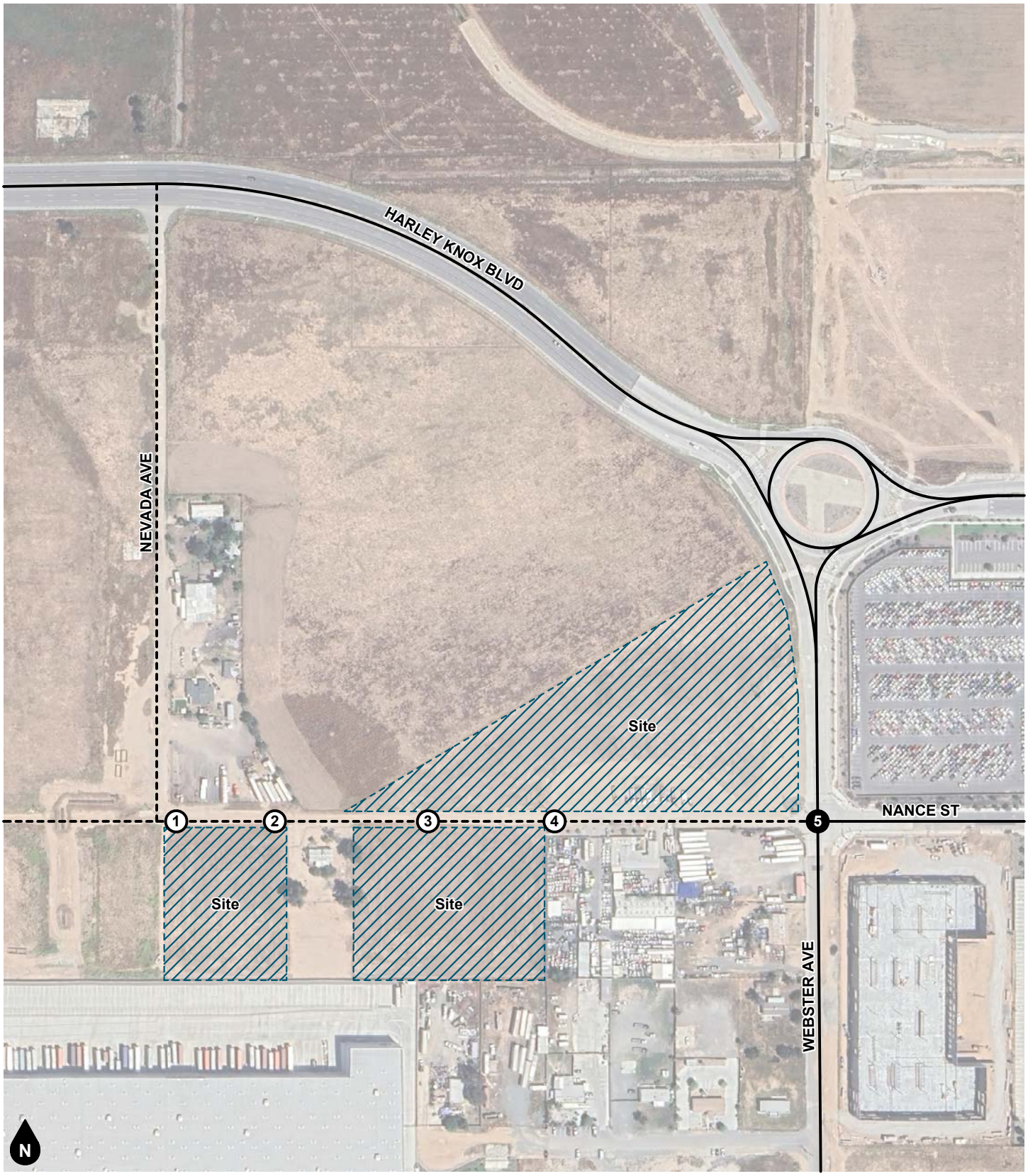
2. Source: Trip generation surveys conducted at the following outdoor trailer storage facilities (see Attachment B):
[a] 1691 South Auto Center Road, San Bernardino, CA (November 30, 2016);
[b] 5087 Patterson Avenue, Perris, CA (January 23, 2019);
[c] 1935 5th Street, San Bernardino, CA (February 8, 2022).

Table 2
Project Trip Generation

Vehicle Type	Quantity[1]	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Trip Generation Rates[2]								
Passenger Car Trips	per AC	0.162	0.232	0.394	0.435	0.561	0.996	13.354
Trucks (2 & 3-Axle)	per AC	0.189	0.674	0.863	0.757	0.251	1.008	15.031
Trucks (4+ Axle)	per AC	0.210	0.309	0.519	0.455	0.280	0.735	14.663
Total		0.561	1.214	1.775	1.647	1.092	2.739	43.049
Vehicle Trips Generated								
Passenger Car	9.73 AC	2	2	4	4	5	10	130
Trucks (2 & 3-Axle)	9.73 AC	2	7	8	7	2	10	146
Trucks (4+ Axle)	9.73 AC	2	3	5	4	3	7	143
Total		*6*	*12*	*17*	*15*	*10*	*27*	*419*
PCE Trips Generated	PCE Factors							
Passenger Car	1.00 PCE	2	2	4	4	5	10	130
Trucks (2 & 3-Axle)	2.00 PCE	4	14	16	14	4	20	292
Trucks (4+ Axle)	3.00 PCE	6	9	15	12	9	21	429
Total		*12*	*25*	*35*	*30*	*18*	*51*	*851*

Notes:
1. AC = Acre(s)

2. Source: Trip generation surveys conducted at three trailer storage uses in Southern California; see Table 1.



Legend

Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

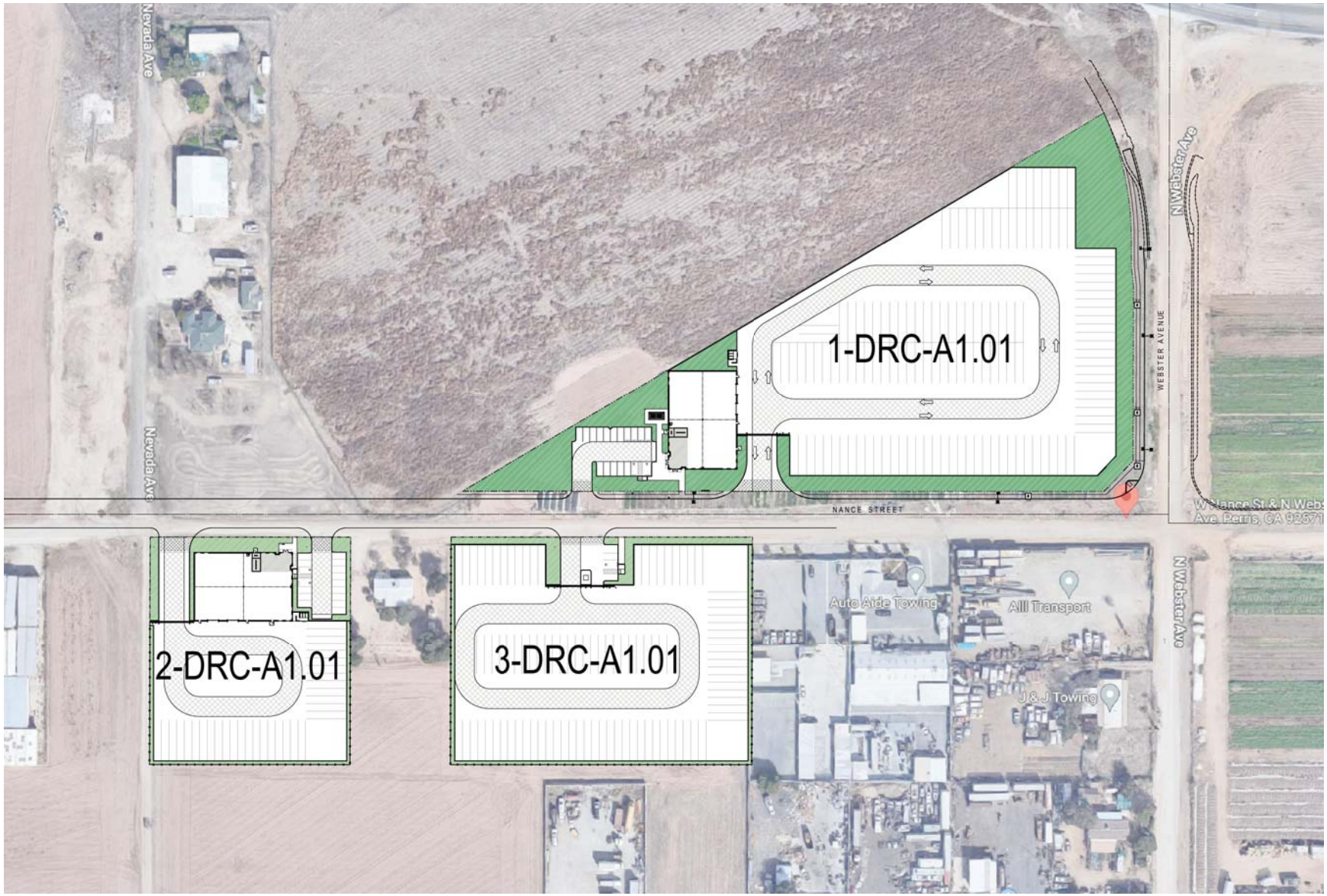


Figure 2
Project Site Plan

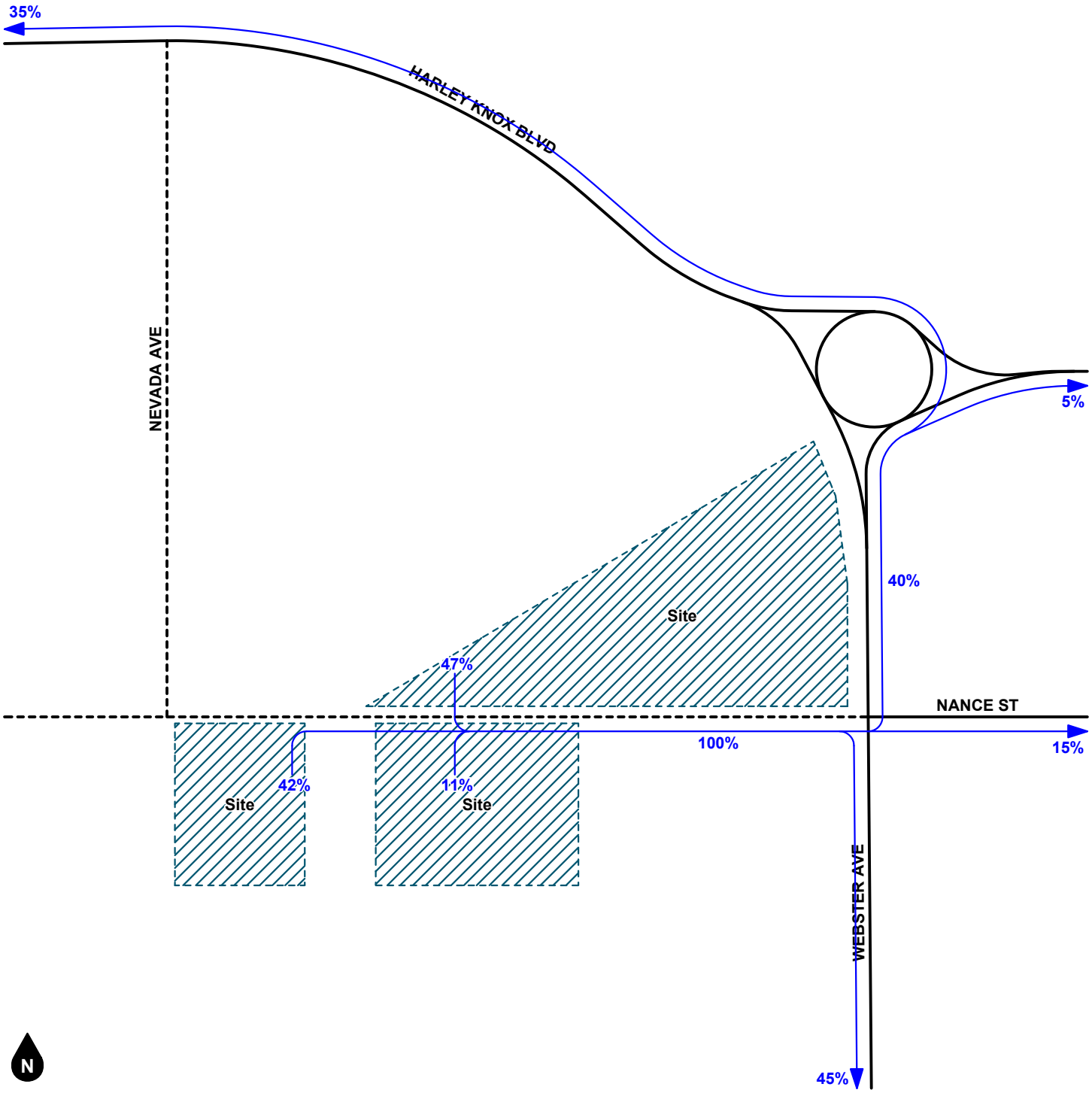


Figure 3
Project Trip Distribution - Passenger Cars

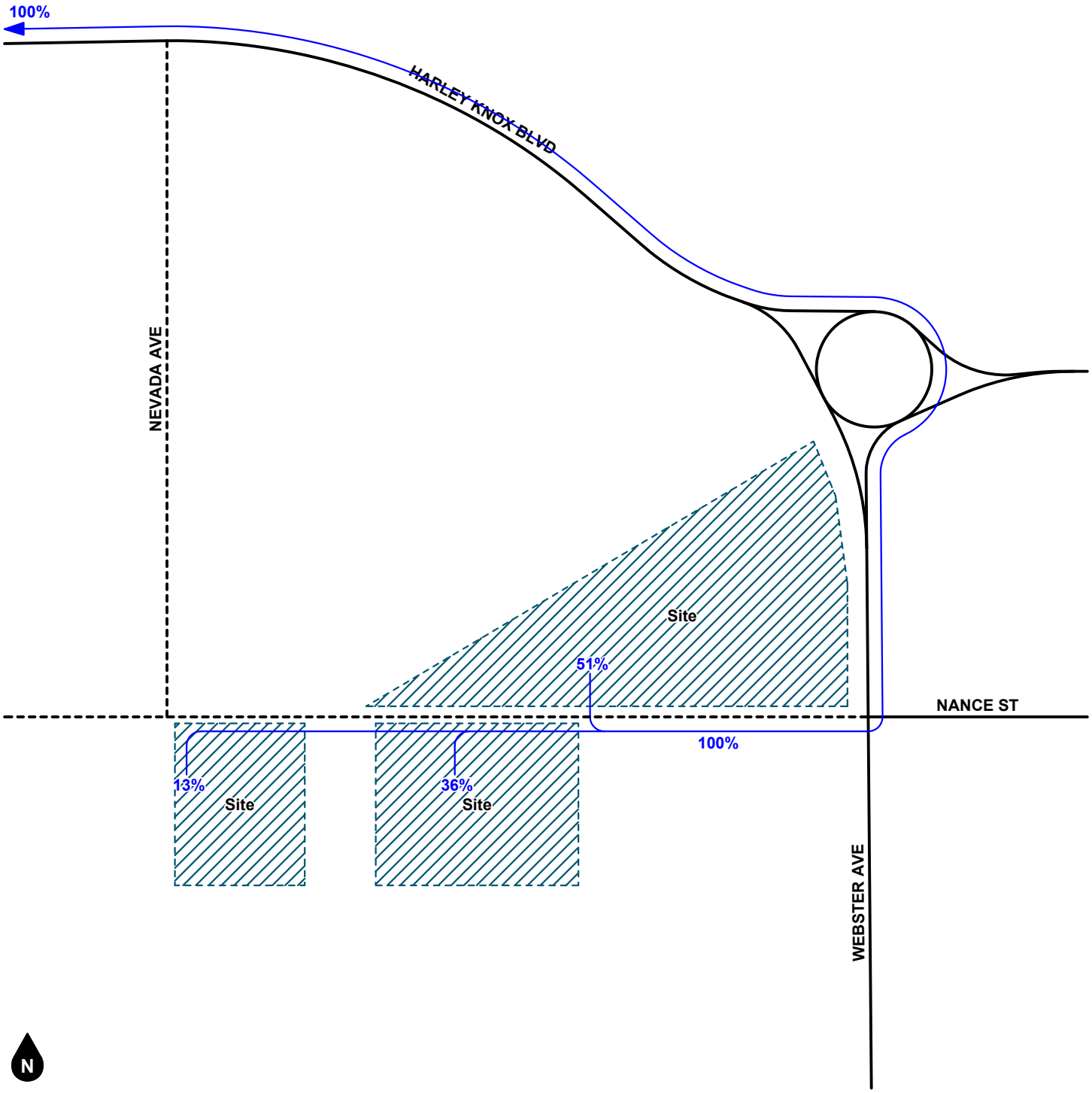


Figure 4
Project Trip Distribution - Trucks

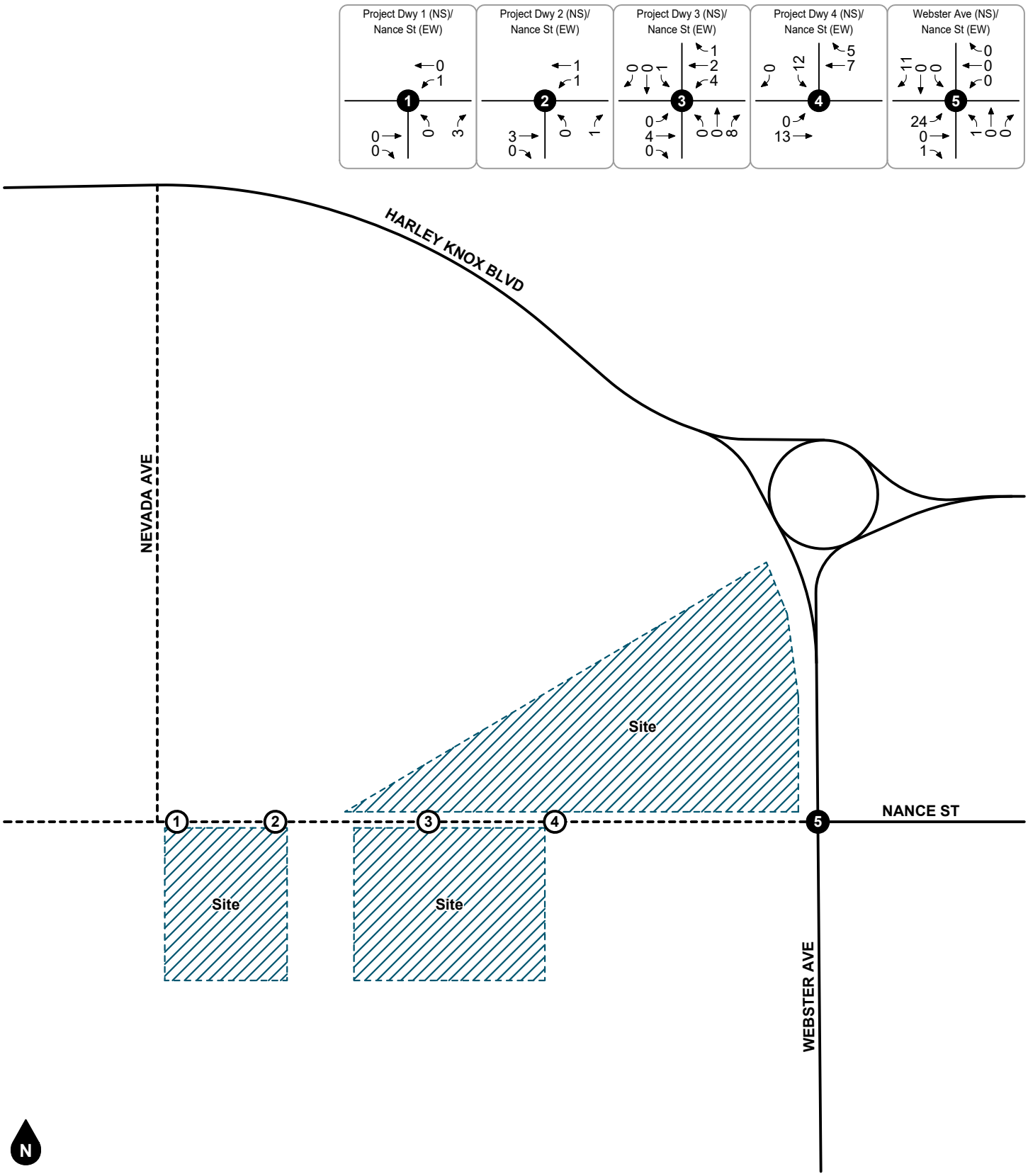


Figure 5
Project AM Peak Hour Intersection Turning Movement Volumes

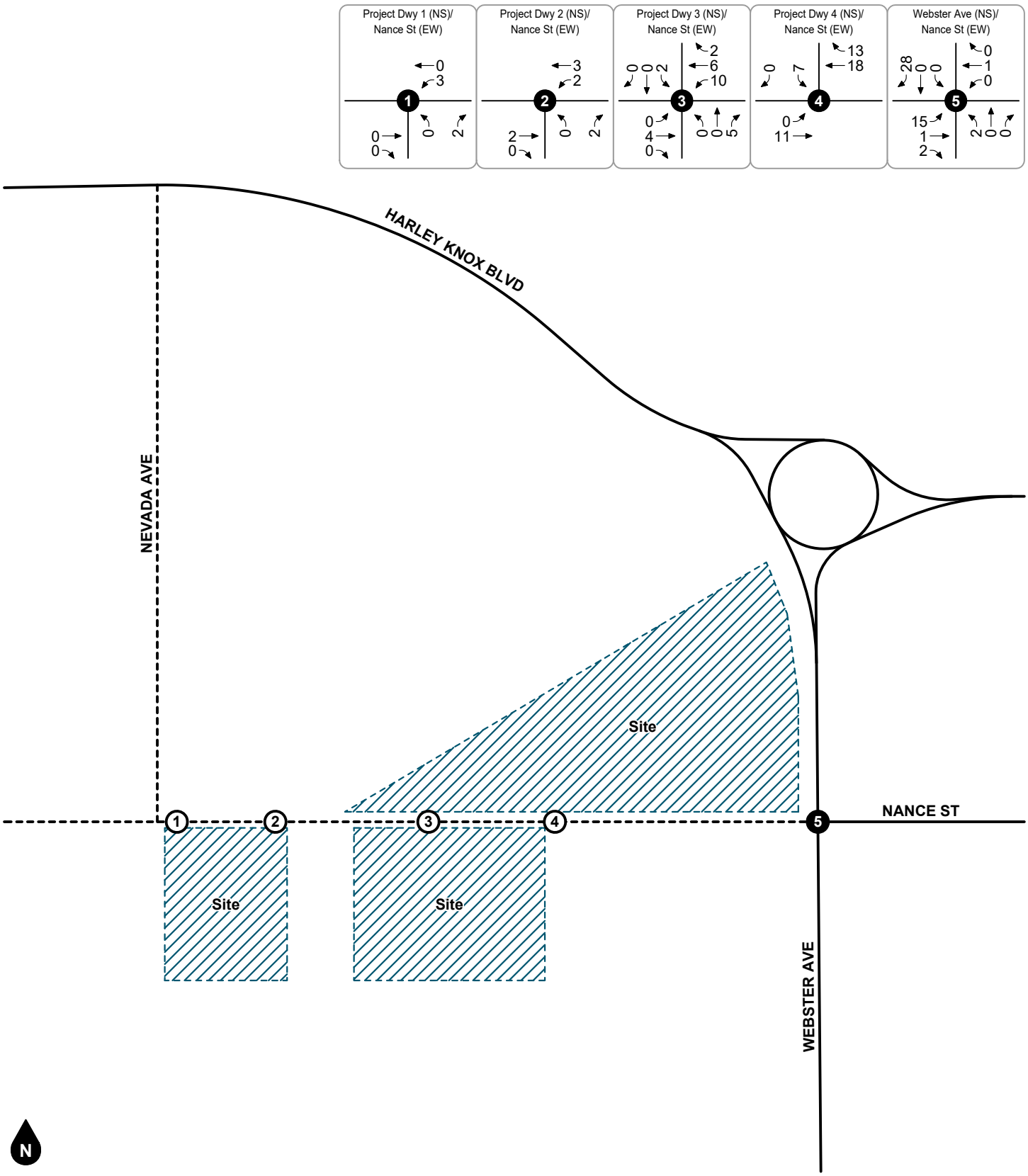


Figure 6
Project PM Peak Hour Intersection Turning Movement Volumes

Attachment A

VMT Scoping Form for Land Use Projects

City of Perris
www.cityofperris.org

CITY OF PERRIS
VMT SCOPING FORM FOR LAND USE PROJECTS

This Scoping Form acknowledges the City of Perris requirements for the evaluation of transportation impacts under CEQA. The analysis provided in this form should follow the City of Perris TIA Guidelines, dated May 12, 2020.

I. Project Description

Tract/Case No. DPR 22-00022, DPR 23-00009, DPR 23-00010

Project Name: Nance Street Trailer Yard

Project Location: West of Webster Street on both sides of Nance Street

Project Description: 9.73 acres of trailer yard storage
(Please attach a copy of the project Site Plan)

Current GP Land Use: PVCC - GI - General Industrial

Proposed GP Land Use: PVCC - GI - General Industrial

Current Zoning: PVCC - GI - General Industrial

Proposed Zoning: PVCC - GI - General Industrial

If a project requires a General Plan Amendment or Zone change, then additional information and analysis should be provided to ensure the project is consistent with RHNA and RTP/SCS Strategies.

II. VMT Screening Criteria

	YES		NO		Attachments:	
A. Is the Project 100% affordable housing?	YES		NO	✔	Attachments:	
B. Is the Project within 1/2 mile of qualifying transit?	YES		NO	✔	Attachments:	
C. Is the Project a local serving land use?	YES		NO	✔	Attachments:	
D. Is the Project in a low VMT area?	YES		NO	✔	Attachments:	
E. Are the Project's Net Daily Trips less than 500 ADT?	YES	✔	NO		Attachments:	Table 1

Low VMT Area Evaluation:

Citywide VMT Averages[1]		
Citywide Home-Based VMT =	15.05	VMT/Capita
Citywide Employment-Based VMT =	11.62	VMT/Employee

WRCOG VMT MAP

Project TAZ	VMT Rate for Project TAZ[1]		Type of Project	
1813		VMT/Capita	Residential:	
	17.7	VMT/Employee	Non-Residential:	✔

[1] Base year (2012) projections from RIVTAM.

Trip Generation Evaluation:

Source of Trip Generation: Surveys of similar land uses

Project Trip Generation: 419 **Average Daily Trips (ADT)**

Internal Trip Credit:	YES		NO	✔	% Trip Credit:	
Pass-By Trip Credit:	YES		NO	✔	% Trip Credit:	
Affordable Housing Credit:	YES		NO	✔	% Trip Credit:	
Existing Land Use Trip Credit:	YES		NO	✔	Trip Credit:	

Net Project Daily Trips: 419 **Average Daily Trips (ADT)** Attachments: Table 1

Does project trip generation warrant an LOS evaluation outside of CEQA? YES ✔ NO

III. VMT Screening Summary

A. Is the Project presumed to have a less than significant impact on VMT?

A Project is presumed to have a less than significant impact on VMT if the Project satisfies at least one (1) of the VMT screening criteria.

Yes. Criteria E.

B. Is mitigation required?

If the Project does not satisfy at least one (1) of the VMT screening criteria, then mitigation is required to reduce the Project's impact on VMT.

No.

C. Is additional VMT modeling required to evaluate Project impacts?

YES		NO	✔

If the Project requires a zone change and/or General Plan Amendment AND generates 2,500 or more net daily trips, then additional VMT modeling using RIVTAM/RIVCOM is required. If the project generates less than 2,500 net daily trips, the Project TAZ VMT Rate can be used for mitigation purposes.

IV. MITIGATION

A. Citywide Average VMT Rate (Threshold of Significance) for Mitigation Purposes:

B. Unmitigated Project TAZ VMT Rate:

C. Percentage Reduction Required to Achieve the Citywide Average VMT: %

D. VMT Reduction Mitigation Measures:

Source of VMT Reduction Estimates:	

Project Location Setting	

	VMT Reduction Mitigation Measure:	Estimated VMT Reduction (%)
1.		0.00%
2.		0.00%
3.		0.00%
4.		0.00%
5.		0.00%
6.		0.00%
7.		0.00%
8.		0.00%
9.		0.00%
10.		0.00%
Total VMT Reduction (%)		**0.00%**

(Attach additional pages, if necessary, and a copy of all mitigation calculations.)

E. Mitigated Project TAZ VMT Rate:

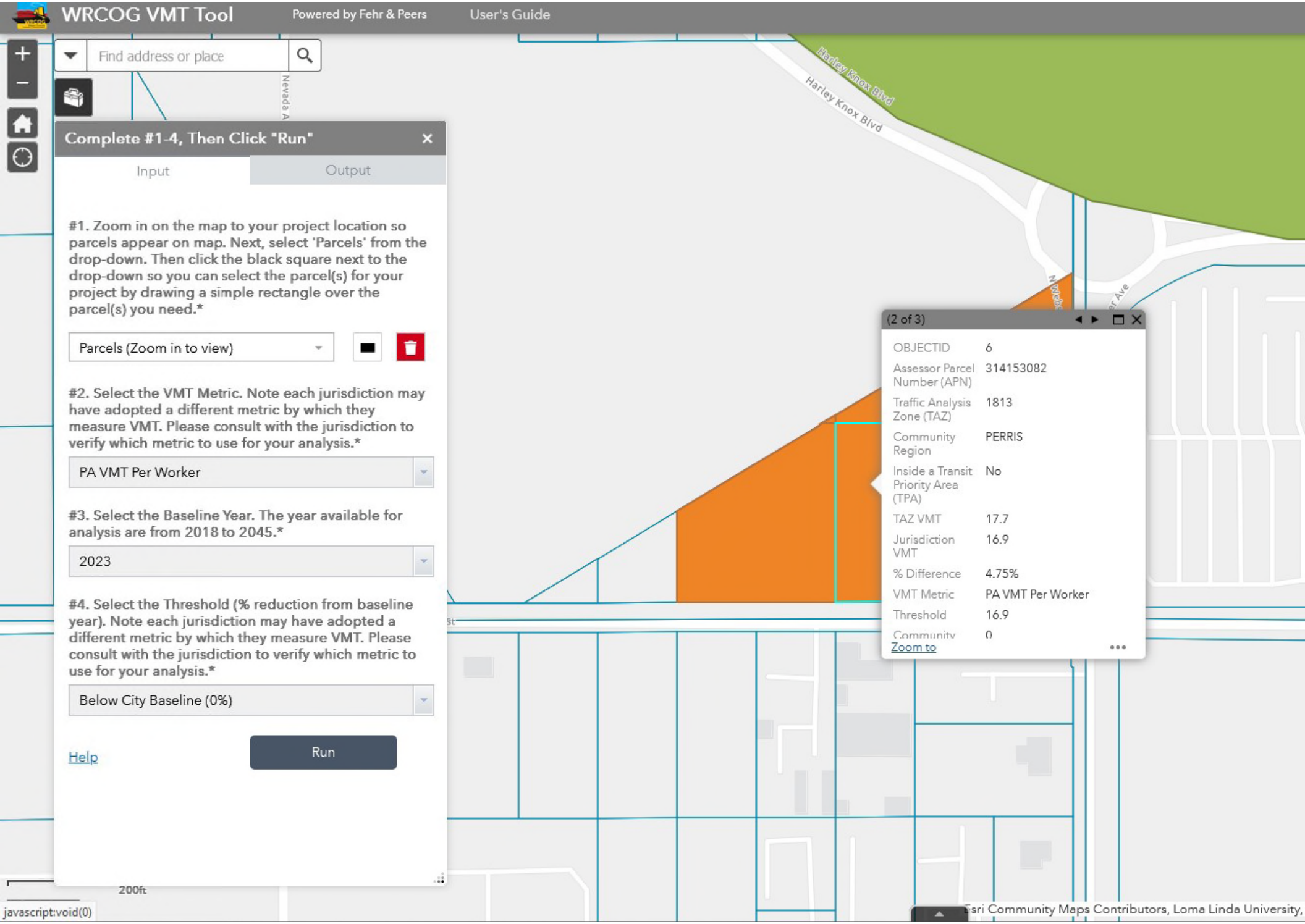
F. Is the project pressumed to have a less than significant impact with mitigation?

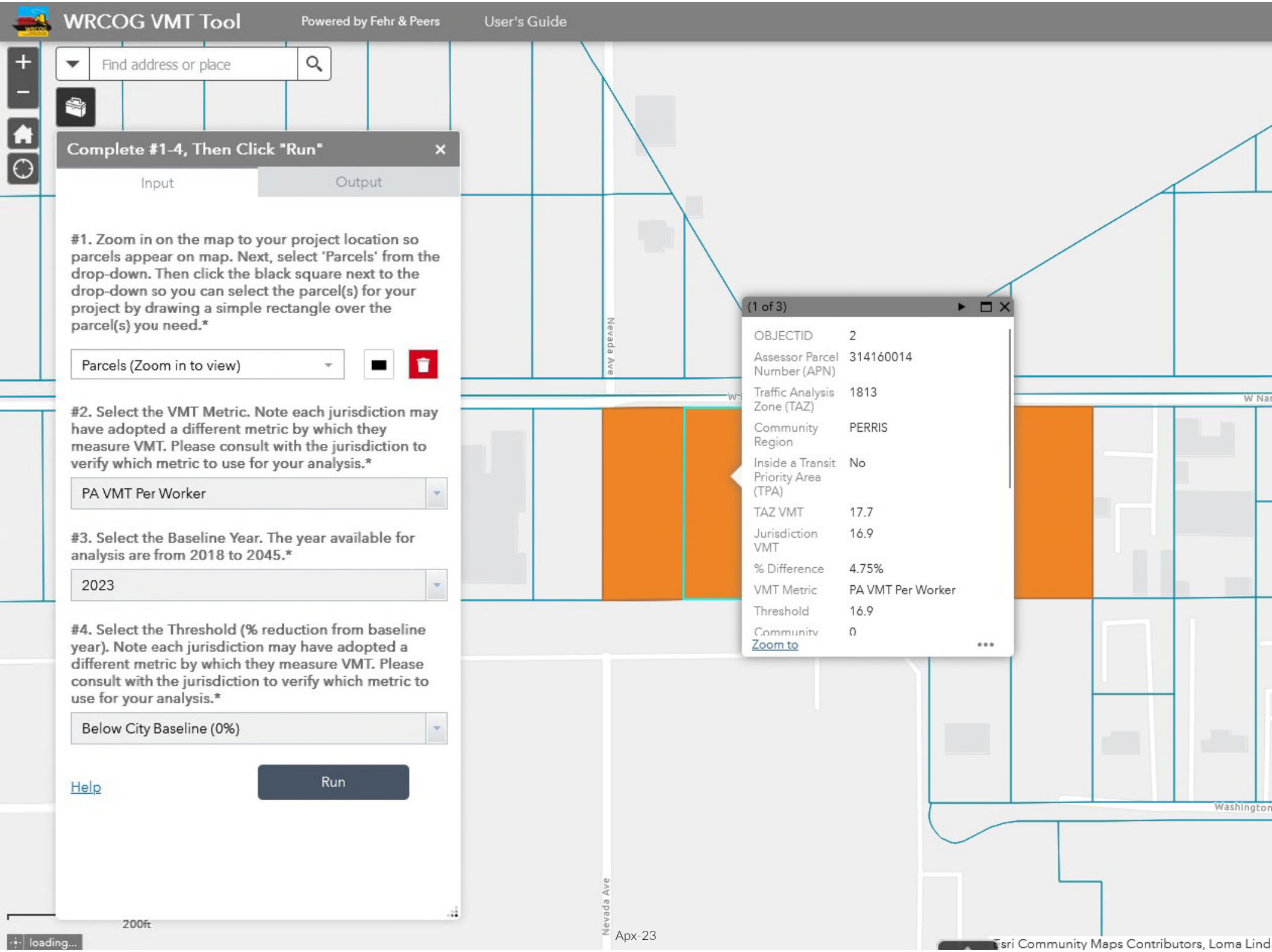
If the mitigated Project VMT rate is below the Citywide Average Rate, then the Project is presumed to have a less than significant impact with mitigation. If the answer is no, then additional VMT modeling may be required and a potentially significant and unavoidable impact may occur. All mitigation measures identified in Section IV.D. are subject to become Conditions of Approval of the project. Development review and processing fees should be submitted with, or prior to the submittal of this Form. The Planning Department staff will not process the Form prior to fees being paid to the City.

Prepared By		Developer/Applicant	
Company:	Ganddini Group, Inc.	**Company:**	Nance Property Owner, LLC
Contact:	Bryan Crawford	**Contact:**	Christine Saunders
Address:	555 Parkcenter Dr, Ste 225, Santa Ana CA 92705	**Address:**	
Phone:	714-795-3100*104	**Phone:**	
Email:	bryan@ganddini.com	**Email:**	christine@csaundersassociates.com
Date:	06-22-2022	**Date:**	06-22-2022

Approved by:

Perris Development Serivces Dept.	Date	Perris Public Works Dept.	Date


WRCOG VMT Tool
Powered by Fehr & Peers
User's Guide
Find address or place
Harley Knox Blvd
Harley Knox Blvd
Complete #1-4, Then Click "Run"
Input
Output
#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*
Parcels (Zoom in to view)
#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.*
PA VMT Per Worker
#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*
2023
#4. Select the Threshold (% reduction from baseline year). 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.*
Below City Baseline (0%)
Help
Run
(2 of 3)
OBJECTID 6
Assessor Parcel Number (APN) 314153082
Traffic Analysis Zone (TAZ) 1813
Community Region PERRIS
Inside a Transit Priority Area (TPA) No
TAZ VMT 17.7
Jurisdiction VMT 16.9
% Difference 4.75%
VMT Metric PA VMT Per Worker
Threshold 16.9
Community 0
Zoom to
200ft
javascript:void(0)
Esri Community Maps Contributors, Loma Linda University,


WRCOG VMT Tool
Powered by Fehr & Peers
User's Guide
Find address or place
Complete #1-4, Then Click "Run"
Input
Output
#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*
Parcels (Zoom in to view)
#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.*
PA VMT Per Worker
#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*
2023
#4. Select the Threshold (% reduction from baseline year). 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.*
Below City Baseline (0%)
Help
Run
(1 of 3)
OBJECTID 2
Assessor Parcel Number (APN) 314160014
Traffic Analysis Zone (TAZ) 1813
Community Region PERRIS
Inside a Transit Priority Area (TPA) No
TAZ VMT 17.7
Jurisdiction VMT 16.9
% Difference 4.75%
VMT Metric PA VMT Per Worker
Threshold 16.9
Community 0
Zoom to
Nevada Ave
Washington
200ft
loading...
Esri Community Maps Contributors, Loma Lind

Attachment B

Trip Count Worksheets for Surveyed Outdoor Trailer Storage Facilities

Totals

Prepared by NDS/ATD

VOLUME

1691 S Auto Center Rd & Dwy

Day: Wednesday
Date: 11/30/2016

City: San Bernardino
Project #: CA16_6181_001e

DAILY TOTALS	IN	OUT	Total
	249	254	503

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		1		2		12:00			1		1		2	
00:15			3		0		3		12:15			2		3		5	
00:30			1		2		3		12:30			7		4		11	
00:45			2	7	0	3	2	10	12:45			4	14	3	11	7	25
01:00			2		4		6		13:00			7		3		10	
01:15			5		2		7		13:15			4		4		8	
01:30			0		4		4		13:30			3		6		9	
01:45			5	12	2	12	7	24	13:45			5	19	7	20	12	39
02:00			3		2		5		14:00			7		7		14	
02:15			2		5		7		14:15			4		1		5	
02:30			0		1		1		14:30			5		6		11	
02:45			2	7	0	8	2	15	14:45			5	21	4	18	9	39
03:00			4		2		6		15:00			4		5		9	
03:15			0		3		3		15:15			3		7		10	
03:30			2		1		3		15:30			2		5		7	
03:45			4	10	2	8	6	18	15:45			4	13	3	20	7	33
04:00			2		3		5		16:00			3		5		8	
04:15			2		4		6		16:15			5		5		10	
04:30			1		2		3		16:30			2		5		7	
04:45			3	8	1	10	4	18	16:45			0	10	1	16	1	26
05:00			1		1		2		17:00			9		4		13	
05:15			1		5		6		17:15			2		5		7	
05:30			5		1		6		17:30			3		4		7	
05:45			6	13	2	9	8	22	17:45			4	18	2	15	6	33
06:00			5		4		9		18:00			1		3		4	
06:15			0		4		4		18:15			2		5		7	
06:30			3		2		5		18:30			2		1		3	
06:45			3	11	3	13	6	24	18:45			1	6	2	11	3	17
07:00			3		1		4		19:00			3		3		6	
07:15			2		1		3		19:15			2		6		8	
07:30			2		3		5		19:30			3		0		3	
07:45			0	7	4	9	4	16	19:45			0	8	3	12	3	20
08:00			2		1		3		20:00			2		1		3	
08:15			2		1		3		20:15			2		2		4	
08:30			1		1		2		20:30			3		0		3	
08:45			1	6	2	5	3	11	20:45			1	8	1	4	2	12
09:00			9		2		11		21:00			0		2		2	
09:15			2		2		4		21:15			2		1		3	
09:30			0		1		1		21:30			3		1		4	
09:45			6	17	3	8	9	25	21:45			0	5	4	8	4	13
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10:15			3		4		7		22:15			1		1		2	
10:30			2		1		3		22:30			1		3		4	
10:45			1	10	2	14	3	24	22:45			0	5	2	6	2	11
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11:15			1		1		2		23:15			1		2		3	
11:30			2		2		4		23:30			1		0		1	
11:45			3	7	2	9	5	16	23:45			2	7	2	5	4	12
TOTALS				115		108		223	TOTALS				134		146		280
SPLIT %				51.6%		48.4%		44.3%	SPLIT %				47.9%		52.1%		55.7%

DAILY TOTALS	IN	OUT	Total
	249	254	503

AM Peak Hour			05:15	09:30	09:45	PM Peak Hour			12:30	13:15	13:15
AM Pk Volume			17	15	30	PM Pk Volume			22	24	43
Pk Hr Factor			0.708	0.536	0.682	Pk Hr Factor			0.786	0.857	0.768
7 - 9 Volume	0	0	13	14	27	4 - 6 Volume	0	0	28	31	59
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			17:00	16:00	17:00
7 - 9 Pk Volume	0	0	7	9	16	4 - 6 Pk Volume	0	0	18	16	33
Pk Hr Factor	0.000	0.000	0.583	0.563	0.800	Pk Hr Factor	0.000	0.000	0.500	0.800	0.635

Cars

Prepared by NDS/ATD

VOLUME

1691 S Auto Center Rd & Dwy

Day: Wednesday
Date: 11/30/2016

City: San Bernardino
Project #: CA16_6181_001e

DAILY TOTALS	IN	OUT	Total
	92	93	185

AM Period	IN		OUT		TOTAL		PM Period	IN		OUT		TOTAL	
00:00	0		1		1		12:00	0		0		0	
00:15	1		0		1		12:15	2		1		3	
00:30	0		1		1		12:30	1		2		3	
00:45	0	1	0	2	0	3	12:45	0	3	3	6	3	9
01:00	0		1		1		13:00	2		1		3	
01:15	1		1		2		13:15	1		0		1	
01:30	0		3		3		13:30	0		1		1	
01:45	2	3	0	5	2	8	13:45	0	3	1	3	1	6
02:00	2		1		3		14:00	2		2		4	
02:15	1		2		3		14:15	1		1		2	
02:30	0		0		0		14:30	2		2		4	
02:45	0	3	0	3	0	6	14:45	2	7	2	7	4	14
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05:00	1		1		2		17:00	4		3		7	
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05:30	5		0		5		17:30	1		3		4	
05:45	6	13	0	1	6	14	17:45	0	5	2	12	2	17
06:00	4		1		5		18:00	0		3		3	
06:15	0		0		0		18:15	0		2		2	
06:30	3		0		3		18:30	1		1		2	
06:45	3	10	0	1	3	11	18:45	0	1	1	7	1	8
07:00	2		0		2		19:00	0		3		3	
07:15	0		0		0		19:15	0		2		2	
07:30	2		0		2		19:30	1		0		1	
07:45	0	4	1	1	1	5	19:45	0	1	2	7	2	8
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08:15	1		0		1		20:15	0		1		1	
08:30	1		0		1		20:30	0		0		0	
08:45	1	5	0	1	1	6	20:45	0		0	2	0	2
09:00	9		1		10		21:00	0		1		1	
09:15	1		0		1		21:15	0		0		0	
09:30	0		0		0		21:30	1		0		1	
09:45	2	12	0	1	2	13	21:45	0	1	1	2	1	3
10:00	0		1		1		22:00	0		0		0	
10:15	1		1		2		22:15	0		0		0	
10:30	1		0		1		22:30	0		2		2	
10:45	0	2	0	2	0	4	22:45	0		0	2	0	2
11:00	0		2		2		23:00	0		0		0	
11:15	1		0		1		23:15	0		1		1	
11:30	0		1		1		23:30	0		0		0	
11:45	1	2	0	3	1	5	23:45	0		1	2	1	2
TOTALS		67		24		**91**	**TOTALS**		25		69		**94**
SPLIT %		73.6%		26.4%		**49.2%**	**SPLIT %**		26.6%		73.4%		**50.8%**

DAILY TOTALS	IN	OUT	Total
	92	93	185

AM Peak Hour			05:15	01:30	**05:15**	**PM Peak Hour**			14:00	15:45	**17:00**
AM Pk Volume			16	6	**17**	**PM Pk Volume**			7	12	**17**
Pk Hr Factor			0.667	0.500	**0.708**	**Pk Hr Factor**			0.875	0.750	**0.607**
7 - 9 Volume	0	0	9	2	**11**	**4 - 6 Volume**	0	0	7	22	**29**
7 - 9 Peak Hour			07:30	07:15	**07:30**	**4 - 6 Peak Hour**			16:15	17:00	**17:00**
7 - 9 Pk Volume	0	0	5	2	**7**	**4 - 6 Pk Volume**	0	0	6	12	**17**
Pk Hr Factor	0.000	0.000	0.625	0.500	**0.583**	**Pk Hr Factor**	0.000	0.000	0.375	0.750	**0.607**

Single

Prepared by NDS/ATD

VOLUME

1691 S Auto Center Rd & Dwy

Day: Wednesday
Date: 11/30/2016

City: San Bernardino
Project #: CA16_6181_001e

DAILY TOTALS	IN	OUT	Total
	97	75	172

AM Period	IN		OUT		TOTAL		PM Period	IN		OUT		TOTAL	
00:00	0		0		0		12:00	0		0		0	
00:15	1		0		1		12:15	0		0		0	
00:30	1		0		1		12:30	4		1		5	
00:45	1	3	0		1	3	12:45	4	8	0	1	4	9
01:00	1		1		2		13:00	4		1		5	
01:15	3		0		3		13:15	1		1		2	
01:30	0		0		0		13:30	3		2		5	
01:45	0	4	2	3	2	7	13:45	4	12	1	5	5	17
02:00	1		1		2		14:00	2		0		2	
02:15	0		3		3		14:15	1		0		1	
02:30	0		0		0		14:30	3		1		4	
02:45	1	2	0	4	1	6	14:45	2	8	1	2	3	10
03:00	0		0		0		15:00	3		1		4	
03:15	0		2		2		15:15	0		3		3	
03:30	0		1		1		15:30	1		2		3	
03:45	2	2	1	4	3	6	15:45	4	8	1	7	5	15
04:00	1		1		2		16:00	2		2		4	
04:15	2		1		3		16:15	1		1		2	
04:30	0		0		0		16:30	0		2		2	
04:45	0	3	1	3	1	6	16:45	0	3	1	6	1	9
05:00	0		0		0		17:00	4		1		5	
05:15	0		4		4		17:15	2		1		3	
05:30	0		0		0		17:30	2		1		3	
05:45	0		1	5	1	5	17:45	3	11	0	3	3	14
06:00	1		2		3		18:00	1		0		1	
06:15	0		3		3		18:15	1		1		2	
06:30	0		1		1		18:30	0		0		0	
06:45	0	1	3	9	3	10	18:45	1	3	0	1	1	4
07:00	0		1		1		19:00	3		0		3	
07:15	0		1		1		19:15	2		2		4	
07:30	0		2		2		19:30	1		0		1	
07:45	0		1	5	1	5	19:45	0	6	0	2	0	8
08:00	0		0		0		20:00	2		0		2	
08:15	0		0		0		20:15	1		0		1	
08:30	0		0		0		20:30	1		0		1	
08:45	0		1	1	1	1	20:45	0	4	1	1	1	5
09:00	0		0		0		21:00	0		0		0	
09:15	1		2		3		21:15	1		0		1	
09:30	0		0		0		21:30	2		0		2	
09:45	2	3	0	2	2	5	21:45	0	3	2	2	2	5
10:00	3		1		4		22:00	1		0		1	
10:15	0		2		2		22:15	1		1		2	
10:30	1		0		1		22:30	0		0		0	
10:45	0	4	0	3	0	7	22:45	0	2	2	3	2	5
11:00	0		1		1		23:00	1		0		1	
11:15	0		0		0		23:15	0		1		1	
11:30	2		0		2		23:30	1		0		1	
11:45	2	4	0	1	2	5	23:45	1	3	1	2	2	5
TOTALS		26		40		**66**	**TOTALS**		71		35		**106**
SPLIT %		39.4%		60.6%		**38.4%**	**SPLIT %**		67.0%		33.0%		**61.6%**

DAILY TOTALS	IN	OUT	Total
	97	75	172

AM Peak Hour			00:30	06:00	**06:00**		**PM Peak Hour**			12:30	15:15	**13:00**	
AM Pk Volume			6	9	**10**		**PM Pk Volume**			13	8	**17**	
Pk Hr Factor			0.500	0.750	**0.833**		**Pk Hr Factor**			0.813	0.667	**0.850**	
7 - 9 Volume	0	0	0	6	**6**		**4 - 6 Volume**	0	0	14	9	**23**	
7 - 9 Peak Hour				07:00	**07:00**		**4 - 6 Peak Hour**			17:00	16:00	**17:00**	
7 - 9 Pk Volume	0	0	0	5	**5**		**4 - 6 Pk Volume**	0	0	11	6	**14**	
Pk Hr Factor	0.000	0.000	0.000	0.625	**0.625**		**Pk Hr Factor**	0.000	0.000	0.688	0.750	**0.700**	

Combo

Prepared by NDS/ATD

VOLUME

1691 S Auto Center Rd & Dwy

Day: Wednesday
Date: 11/30/2016

City: San Bernardino
Project #: CA16_6181_001e

DAILY TOTALS	IN	OUT	Total
	60	86	146

AM Period	IN		OUT		TOTAL		PM Period	IN		OUT		TOTAL	
00:00	1		0		1		12:00	1		1		2	
00:15	1		0		1		12:15	0		2		2	
00:30	0		1		1		12:30	2		1		3	
00:45	1	3	0	1	1	4	12:45	0	3	0	4	0	7
01:00	1		2		3		13:00	1		1		2	
01:15	1		1		2		13:15	2		3		5	
01:30	0		1		1		13:30	0		3		3	
01:45	3	5	0	4	3	9	13:45	1	4	5	12	6	16
02:00	0		0		0		14:00	3		5		8	
02:15	1		0		1		14:15	2		0		2	
02:30	0		1		1		14:30	0		3		3	
02:45	1	2	0	1	1	3	14:45	1	6	1	9	2	15
03:00	0		1		1		15:00	1		1		2	
03:15	0		1		1		15:15	1		2		3	
03:30	0		0		0		15:30	1		1		2	
03:45	1	1	1	3	2	4	15:45	0	3	0	4	0	7
04:00	0		0		0		16:00	1		0		1	
04:15	0		2		2		16:15	3		0		3	
04:30	0		2		2		16:30	1		0		1	
04:45	0		0	4	0	4	16:45	0	5	0		0	5
05:00	0		0		0		17:00	1		0		1	
05:15	0		1		1		17:15	0		0		0	
05:30	0		1		1		17:30	0		0		0	
05:45	0		1	3	1	3	17:45	1	2	0		1	2
06:00	0		1		1		18:00	0		0		0	
06:15	0		1		1		18:15	1		2		3	
06:30	0		1		1		18:30	1		0		1	
06:45	0		0	3	0	3	18:45	0	2	1	3	1	5
07:00	1		0		1		19:00	0		0		0	
07:15	2		0		2		19:15	0		2		2	
07:30	0		1		1		19:30	1		0		1	
07:45	0	3	2	3	2	6	19:45	0	1	1	3	1	4
08:00	0		0		0		20:00	0		0		0	
08:15	1		1		2		20:15	1		1		2	
08:30	0		1		1		20:30	2		0		2	
08:45	0	1	1	3	1	4	20:45	1	4	0	1	1	5
09:00	0		1		1		21:00	0		1		1	
09:15	0		0		0		21:15	1		1		2	
09:30	0		1		1		21:30	0		1		1	
09:45	2	2	3	5	5	7	21:45	0	1	1	4	1	5
10:00	1		5		6		22:00	2		0		2	
10:15	2		1		3		22:15	0		0		0	
10:30	0		1		1		22:30	1		1		2	
10:45	1	4	2	9	3	13	22:45	0	3	0	1	0	4
11:00	1		1		2		23:00	2		1		3	
11:15	0		1		1		23:15	1		0		1	
11:30	0		1		1		23:30	0		0		0	
11:45	0	1	2	5	2	6	23:45	1	4	0	1	1	5
TOTALS		22		44		66	TOTALS		38		42		80
SPLIT %		33.3%		66.7%		45.2%	SPLIT %		47.5%		52.5%		54.8%

DAILY TOTALS	IN	OUT	Total
	60	86	146

AM Peak Hour			01:00	09:30	09:30		PM Peak Hour			13:15	13:15	13:15	
AM Pk Volume			5	10	15		PM Pk Volume			6	16	22	
Pk Hr Factor			0.417	0.500	0.625		Pk Hr Factor			0.500	0.800	0.688	
7 - 9 Volume	0	0	4	6	10		4 - 6 Volume	0	0	7	0	7	
7 - 9 Peak Hour			07:00	07:30	07:00		4 - 6 Peak Hour			16:00		16:00	
7 - 9 Pk Volume	0	0	3	4	6		4 - 6 Pk Volume	0	0	5	0	5	
Pk Hr Factor	0.000	0.000	0.375	0.500	0.750		Pk Hr Factor	0.000	0.000	0.417	0.000	0.417	

City: Perris
Location: 5087 Patterson Avenue
Date: 1/23/2019
Count Type: Classification

	Entering					
	Pass Veh	Large 2 Axle	3 Axle	4 Axle	5+ Axle	Total
0:00	0	0	0	0	0	0
0:15	0	0	0	0	0	0
0:30	0	0	0	0	0	0
0:45	1	0	0	0	0	1
1:00	1	0	0	0	0	1
1:15	0	0	0	0	0	0
1:30	0	0	0	0	0	0
1:45	0	0	1	0	0	1
2:00	0	0	0	0	0	0
2:15	0	0	0	0	0	0
2:30	0	0	0	0	0	0
2:45	0	0	0	0	0	0
3:00	0	0	0	0	0	0
3:15	0	0	0	0	0	0
3:30	0	0	0	0	0	0
3:45	0	0	0	0	0	0
4:00	0	0	0	0	0	0
4:15	0	0	0	0	0	0
4:30	0	0	0	0	0	0
4:45	0	0	0	0	0	0
5:00	0	0	0	0	0	0
5:15	0	0	0	0	0	0
5:30	0	0	0	0	0	0
5:45	0	0	0	0	0	0
6:00	1	0	0	0	0	1
6:15	0	0	0	0	1	1
6:30	0	0	0	0	1	1
6:45	2	0	0	0	3	5
7:00	0	0	0	0	0	0
7:15	0	0	1	0	0	1
7:30	0	0	0	0	1	1
7:45	0	0	0	0	0	0
8:00	2	0	0	0	0	2
8:15	0	0	0	0	0	0
8:30	0	0	0	0	0	0
8:45	0	1	0	0	0	1
9:00	1	0	0	1	1	3
9:15	0	0	0	0	0	0
9:30	0	0	0	0	0	0
9:45	1	0	0	0	0	1
10:00	0	0	0	0	0	0
10:15	0	0	0	0	0	0
10:30	0	0	0	0	0	0
10:45	0	0	0	0	0	0
11:00	0	0	0	0	1	1
11:15	0	0	1	0	1	2
11:30	0	1	1	0	1	3
11:45	0	0	0	0	0	0

	Exiting					
	Pass Veh	Large 2 Axle	3 Axle	4 Axle	5+ Axle	Total
0:00	0	0	0	0	0	0
0:15	0	0	0	0	0	0
0:30	0	0	0	0	0	0
0:45	0	0	0	0	0	0
1:00	0	0	0	0	0	0
1:15	0	0	0	0	0	0
1:30	0	0	0	0	0	0
1:45	0	0	0	0	0	0
2:00	0	0	1	0	0	1
2:15	0	0	0	0	0	0
2:30	0	0	0	0	0	0
2:45	0	0	0	0	0	0
3:00	1	0	0	0	0	1
3:15	1	0	0	0	0	1
3:30	0	0	0	0	0	0
3:45	0	0	0	0	0	0
4:00	0	0	0	0	0	0
4:15	0	0	0	0	0	0
4:30	0	0	0	0	0	0
4:45	0	0	0	0	0	0
5:00	0	0	0	0	0	0
5:15	0	0	0	0	0	0
5:30	0	0	0	0	0	0
5:45	0	0	0	0	0	0
6:00	0	0	0	0	0	0
6:15	0	0	0	0	0	0
6:30	1	0	1	0	0	2
6:45	0	0	0	0	0	0
7:00	1	0	3	0	0	4
7:15	1	0	1	0	0	2
7:30	0	0	1	0	0	1
7:45	0	0	0	0	0	0
8:00	0	1	0	0	0	1
8:15	1	0	0	0	0	1
8:30	0	0	0	0	0	0
8:45	0	1	0	0	0	1
9:00	0	0	0	0	0	0
9:15	1	0	0	0	0	1
9:30	0	1	0	0	0	1
9:45	0	0	1	0	0	1
10:00	1	0	0	0	0	1
10:15	0	0	0	0	0	0
10:30	0	0	0	0	0	0
10:45	0	0	0	0	0	0
11:00	0	0	0	0	0	0
11:15	0	0	1	0	0	1
11:30	0	0	2	0	0	2
11:45	0	0	0	1	1	2

City: Perris
Location: 5087 Patterson Avenue
Date: 1/23/2019
Count Type: Classification

	Entering					
	Pass Veh	Large 2 Axle	3 Axle	4 Axle	5+ Axle	Total
12:00	0	1	0	0	0	1
12:15	0	1	0	0	2	3
12:30	0	2	0	0	0	2
12:45	0	0	0	0	1	1
13:00	0	0	1	0	1	2
13:15	0	0	0	0	0	0
13:30	1	0	0	2	1	4
13:45	0	0	0	0	0	0
14:00	1	0	0	0	2	3
14:15	0	0	0	0	0	0
14:30	0	0	0	0	0	0
14:45	0	0	0	0	0	0
15:00	1	0	0	0	0	1
15:15	0	0	0	0	0	0
15:30	0	0	0	0	0	0
15:45	0	0	0	0	2	2
16:00	0	0	0	1	0	1
16:15	0	0	0	0	0	0
16:30	1	0	0	0	0	1
16:45	0	0	0	0	0	0
17:00	0	1	0	0	0	1
17:15	1	1	0	0	0	2
17:30	0	0	0	0	0	0
17:45	0	1	1	0	0	2
18:00	1	0	0	0	0	1
18:15	0	0	0	0	2	2
18:30	0	0	0	0	3	3
18:45	0	1	0	0	0	1
19:00	0	1	0	0	0	1
19:15	0	0	0	0	0	0
19:30	1	0	0	1	0	2
19:45	2	0	0	0	1	3
20:00	0	0	0	0	0	0
20:15	0	1	0	0	0	1
20:30	0	2	1	0	0	3
20:45	1	1	0	0	0	2
21:00	0	0	1	0	0	1
21:15	0	0	0	0	0	0
21:30	0	0	0	0	0	0
21:45	0	2	0	0	1	3
22:00	0	2	1	0	0	3
22:15	0	0	0	1	0	1
22:30	0	0	0	0	0	0
22:45	0	1	0	0	0	1
23:00	0	2	0	1	1	4
23:15	0	0	0	0	0	0
23:30	0	0	0	0	0	0
23:45	0	0	0	0	0	0
TOTAL	**19**	**22**	**9**	**7**	**27**	**84**

	Exiting					
	Pass Veh	Large 2 Axle	3 Axle	4 Axle	5+ Axle	Total
12:00	0	0	1	0	0	1
12:15	0	0	0	2	0	2
12:30	0	0	2	0	0	2
12:45	0	0	0	0	0	0
13:00	1	0	2	2	0	5
13:15	0	0	1	0	0	1
13:30	1	0	1	0	0	2
13:45	0	2	0	0	0	2
14:00	0	0	1	0	0	1
14:15	0	0	0	0	0	0
14:30	0	0	1	0	0	1
14:45	0	0	0	0	0	0
15:00	0	0	0	0	0	0
15:15	1	0	0	0	0	1
15:30	0	0	0	0	0	0
15:45	0	0	1	0	0	1
16:00	0	0	1	0	0	1
16:15	0	1	0	0	0	1
16:30	1	0	0	0	0	1
16:45	0	0	0	0	0	0
17:00	0	0	0	1	0	1
17:15	1	0	0	1	0	2
17:30	0	0	0	0	0	0
17:45	0	0	0	1	0	1
18:00	0	0	0	0	1	1
18:15	0	0	0	0	0	0
18:30	2	2	0	0	0	4
18:45	0	1	2	0	0	3
19:00	0	0	0	0	1	1
19:15	0	0	0	1	0	1
19:30	0	0	0	0	0	0
19:45	0	1	0	0	0	1
20:00	1	0	1	0	0	2
20:15	0	0	0	1	0	1
20:30	0	1	0	1	0	2
20:45	0	0	0	1	1	2
21:00	2	0	0	0	0	2
21:15	0	0	0	0	0	0
21:30	0	0	1	0	0	1
21:45	0	0	0	0	1	1
22:00	0	0	1	2	0	3
22:15	0	0	1	0	1	2
22:30	0	1	0	0	0	1
22:45	0	0	0	1	0	1
23:00	0	1	0	0	0	1
23:15	0	0	1	1	1	3
23:30	0	0	0	0	0	0
23:45	1	0	0	0	0	1
TOTAL	**19**	**13**	**29**	**16**	**7**	**84**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	San Bernardino
Location:	1935 5th Street
Date:	2/8/2022
Count Type:	24 Hour Classified Driveway Count

	Entering				
	Pass Veh	Large 2 Axle	3 Axle	4+ Axle	Total
0:00	0	0	0	1	1
0:15	0	0	1	0	1
0:30	0	0	0	0	0
0:45	0	0	0	2	2
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	2	0	0	0	2
2:00	0	0	1	0	1
2:15	1	0	2	0	3
2:30	1	0	0	1	2
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	2	2
3:30	0	0	0	0	0
3:45	1	0	0	1	2
4:00	1	0	1	0	2
4:15	2	0	0	0	2
4:30	3	0	1	0	4
4:45	2	0	1	1	4
5:00	4	0	0	1	5
5:15	0	0	0	1	1
5:30	1	0	0	0	1
5:45	3	0	1	1	5
6:00	1	0	1	0	2
6:15	0	0	0	0	0
6:30	1	0	0	1	2
6:45	2	0	0	0	2
7:00	1	0	0	0	1
7:15	0	0	0	0	0
7:30	0	1	1	0	2
7:45	0	0	0	1	1
8:00	0	0	0	0	0
8:15	0	0	1	0	1
8:30	0	0	0	0	0
8:45	0	0	0	0	0
9:00	0	0	0	2	2
9:15	0	0	0	1	1
9:30	0	0	0	0	0
9:45	1	0	0	1	2
10:00	0	0	2	0	2
10:15	0	0	0	0	0
10:30	0	0	0	0	0
10:45	0	0	0	2	2
11:00	0	0	0	0	0
11:15	0	0	1	0	1
11:30	0	0	1	0	1
11:45	0	0	1	1	2

	Exiting				
	Pass Veh	Large 2 Axle	3 Axle	4+ Axle	Total
0:00	0	0	0	0	0
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	1	0	0	0	1
1:00	0	0	1	0	1
1:15	1	0	0	0	1
1:30	0	0	0	0	0
1:45	1	0	2	0	3
2:00	0	0	0	1	1
2:15	0	0	1	0	1
2:30	0	0	0	2	2
2:45	0	0	0	1	1
3:00	0	0	0	1	1
3:15	1	0	0	0	1
3:30	0	0	0	1	1
3:45	0	0	0	1	1
4:00	1	0	0	1	2
4:15	1	0	2	0	3
4:30	0	0	1	0	1
4:45	0	0	0	0	0
5:00	1	0	1	1	3
5:15	2	0	2	0	4
5:30	1	0	0	3	4
5:45	0	0	0	0	0
6:00	2	0	0	0	2
6:15	1	0	0	1	2
6:30	0	0	2	0	2
6:45	0	0	1	1	2
7:00	1	0	0	2	3
7:15	0	0	0	0	0
7:30	0	0	3	2	5
7:45	0	0	0	0	0
8:00	0	0	0	0	0
8:15	0	1	0	2	3
8:30	1	0	1	0	2
8:45	0	0	0	1	1
9:00	0	0	0	0	0
9:15	0	0	0	0	0
9:30	0	0	0	2	2
9:45	0	0	0	0	0
10:00	0	0	1	0	1
10:15	0	0	0	1	1
10:30	0	0	2	1	3
10:45	0	0	1	0	1
11:00	0	0	1	1	2
11:15	0	0	1	0	1
11:30	0	0	2	1	3
11:45	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	San Bernardino
Location:	1935 5th Street
Date:	2/8/2022
Count Type:	24 Hour Classified Driveway Count

	Entering				
	Pass Veh	Large 2 Axle	3 Axle	4+ Axle	Total
12:00	1	0	3	1	5
12:15	2	0	0	2	4
12:30	0	0	0	0	0
12:45	1	1	0	1	3
13:00	0	0	1	2	3
13:15	0	0	2	0	2
13:30	0	0	0	2	2
13:45	1	0	0	0	1
14:00	1	0	1	2	4
14:15	0	0	0	1	1
14:30	0	0	0	0	0
14:45	0	0	1	2	3
15:00	1	0	0	2	3
15:15	0	0	0	3	3
15:30	3	0	1	2	6
15:45	1	0	1	0	2
16:00	1	0	0	0	1
16:15	1	0	0	0	1
16:30	0	0	0	2	2
16:45	1	0	1	1	3
17:00	1	0	1	3	5
17:15	2	0	1	1	4
17:30	1	0	0	0	1
17:45	0	0	0	1	1
18:00	0	0	0	2	2
18:15	1	0	1	0	2
18:30	0	0	0	3	3
18:45	0	0	0	0	0
19:00	1	0	0	0	1
19:15	1	0	0	0	1
19:30	0	0	0	1	1
19:45	0	0	0	2	2
20:00	0	0	0	0	0
20:15	1	0	0	0	1
20:30	1	0	1	1	3
20:45	0	0	0	0	0
21:00	0	0	0	0	0
21:15	1	0	1	0	2
21:30	0	0	1	0	1
21:45	1	0	0	1	2
22:00	0	0	0	0	0
22:15	0	0	0	0	0
22:30	0	0	0	0	0
22:45	0	0	1	0	1
23:00	0	0	0	0	0
23:15	0	0	1	0	1
23:30	0	0	2	1	3
23:45	0	0	0	1	1
TOTAL	**52**	**2**	**37**	**60**	**151**

	Exiting				
	Pass Veh	Large 2 Axle	3 Axle	4+ Axle	Total
12:00	0	0	2	2	4
12:15	0	0	0	0	0
12:30	0	0	2	0	2
12:45	0	1	1	0	2
13:00	0	0	0	2	2
13:15	1	0	1	0	2
13:30	0	0	1	2	3
13:45	1	0	0	2	3
14:00	2	0	0	0	2
14:15	0	0	1	1	2
14:30	0	0	1	0	1
14:45	1	0	1	0	2
15:00	4	0	0	0	4
15:15	1	0	0	0	1
15:30	3	0	0	1	4
15:45	1	0	0	2	3
16:00	2	0	1	0	3
16:15	1	0	0	1	2
16:30	0	0	1	0	1
16:45	1	0	0	0	1
17:00	0	0	1	1	2
17:15	2	0	1	0	3
17:30	1	0	0	0	1
17:45	2	0	0	0	2
18:00	0	0	2	1	3
18:15	1	0	0	2	3
18:30	2	0	0	1	3
18:45	1	0	1	0	2
19:00	2	0	0	0	2
19:15	0	0	0	0	0
19:30	0	0	1	0	1
19:45	0	0	0	2	2
20:00	0	0	0	1	1
20:15	0	0	0	2	2
20:30	1	0	1	0	2
20:45	0	0	1	0	1
21:00	0	0	0	0	0
21:15	0	0	0	0	0
21:30	0	0	0	0	0
21:45	0	0	1	1	2
22:00	1	0	0	0	1
22:15	0	0	2	1	3
22:30	1	0	0	0	1
22:45	0	0	0	0	0
23:00	0	0	0	1	1
23:15	0	0	0	0	0
23:30	0	0	0	2	2
23:45	0	0	0	0	0
	47	**2**	**48**	**55**	**152**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

October 18, 2023

Mr. Alfredo Garcia
CITY OF PERRIS (Planning Division)
135 North "D" Street
Perris, CA 92570

Subject: Nance Street Trailer Yard (DPR 22–00022, DPR 23–00009 and DPR 23–00010) Scoping Agreement, VMT Analysis and Transportation Assessment Review #2, City of Perris

Dear Mr. Garcia,

Introduction

RK ENGINEERING GROUP, INC. (RK) has reviewed the Scoping Agreement, VMT Analysis, and Transportation Screening Assessment #2 for the Nance Street Trailer Yard Project (DPR 22–00022, DPR 23–00009 and DPR 23–00010), located in the City of Perris. The project is located on both sides of Nance Street, west of Webster Avenue, in the PVCCSP (Perris Valley Commerce Center Specific Plan).

The proposed project involves construction of a truck trailer yard consisting of 262 trailer parking spaces, 38 passenger car parking spaces, two 9,900 square foot (SF) mechanic bays totaling 19,800 SF, and two 1,800 SF office buildings totaling 3,600 SF. The project proposes one full access driveway for trucks and one full access driveway for passenger cars on the portion of the project site north of Nance Street, one full access driveway for trucks and one full access driveway for passenger cars on the western portion of the project site south of Nance Street, and one full access driveway for trucks and passenger cars on the eastern portion of the project site south of Nance Street.

RK has reviewed the Scoping Agreement, VMT Analysis, and Transportation Screening Assessment #2 dated October 9, 2023, prepared by Ganddini Group. RK has reviewed the Scoping Agreement, VMT Analysis, and Transportation Screening Assessment #2 pursuant to City of Perris requirements. Based upon this review, it is acceptable as currently written.

Comments

1. The Scoping Agreement, VMT Analysis, and Transportation Screening Assessment #2 is acceptable as currently written.

Conclusions

RK Engineering Group Inc. has reviewed the Scoping Agreement, VMT Analysis, and Transportation Screening Assessment #2 for the Nance Street Trailer Yard Project (DPR 22–00022, DPR 23–00009 and DPR 23–00010), located in the City of Perris. Based upon this review, the Scoping Agreement, VMT Analysis, and Transportation Screening Assessment #2 is acceptable. The traffic engineer can commence work on the traffic impact study and submit to the City when completed.

RK appreciates this opportunity to work with the City of Perris on this project. If you have any questions, please contact us at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.

Justin Tucker, P.E.
Principal Engineer

Robert Kahn, P.E.
Founding Principal

Registered Civil Engineer 92866

Attachment

XC: Kenneth Phung, City of Perris
Patricia Brenes, City of Perris
John Pourkazemi, City of Perris
Kamran Saber, City of Perris

RK19408.DOC
JN:2126-2023-08

APPENDIX C

VOLUME COUNT WORKSHEETS

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Perris	PROJECT #:	SC4089
Wed, Jun 14, 23	NORTH & SOUTH:	Webster	LOCATION #:	1
	EAST & WEST:	Nance	CONTROL:	SIGNAL

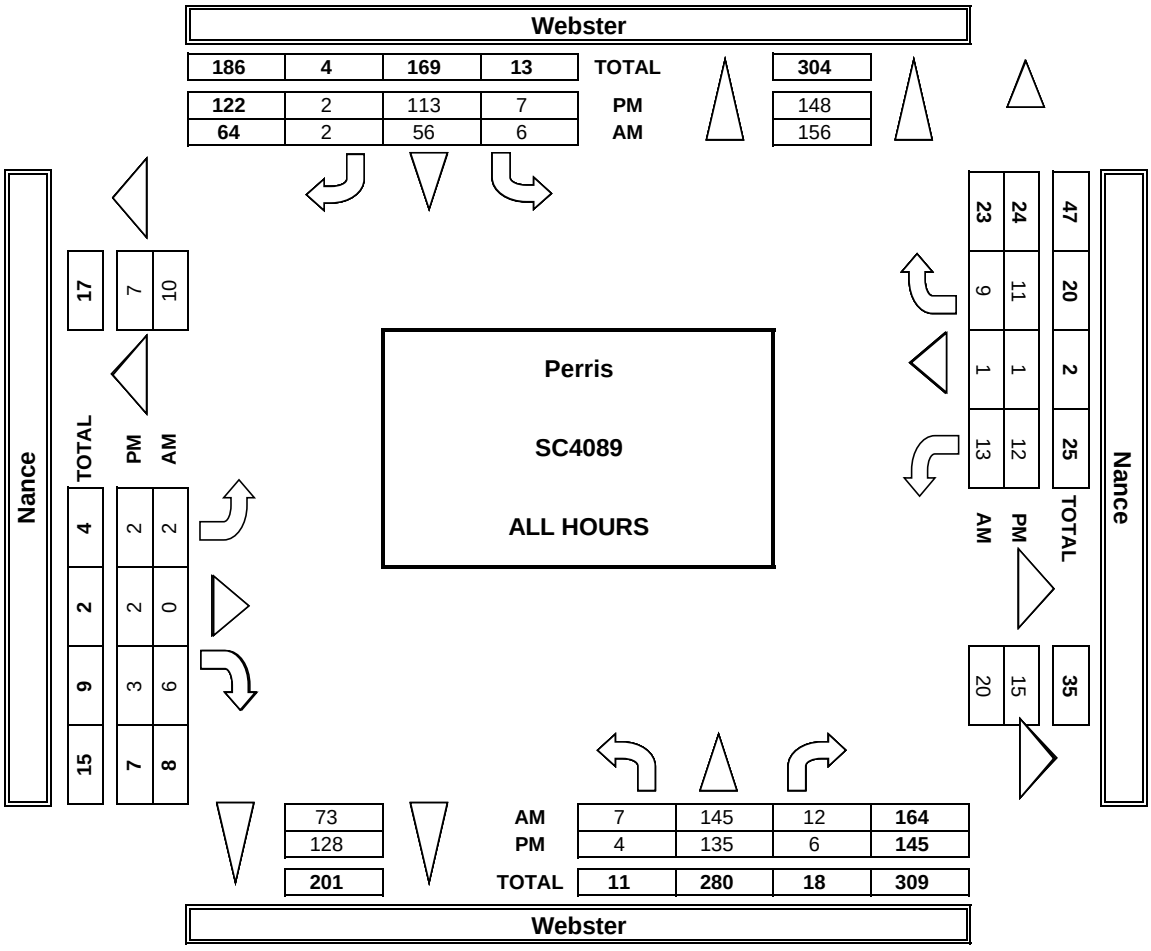
NOTES:

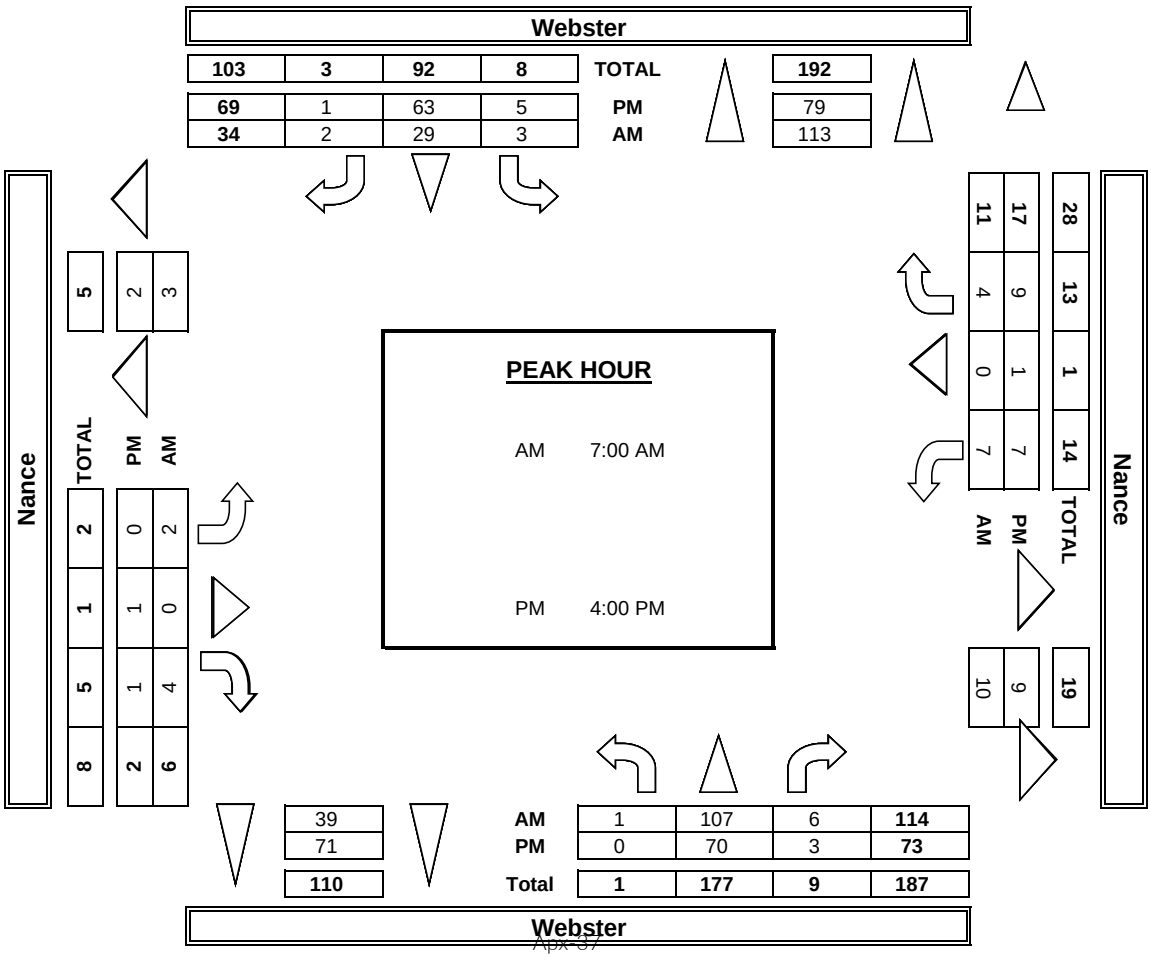
AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (Webster)			SOUTHBOUND (Webster)			EASTBOUND (Nance)			WESTBOUND (Nance)				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	27	3	1	4	1	0	0	0	4	0	0	40	0	0	0	0	0
	7:15 AM	0	27	1	1	4	0	1	0	3	1	0	0	38	0	0	0	0	0
	7:30 AM	1	30	0	0	10	0	0	0	0	2	0	3	46	0	0	0	1	1
	7:45 AM	0	23	2	1	11	1	1	0	1	0	0	1	41	0	0	0	0	0
	8:00 AM	1	9	3	0	8	0	0	0	0	2	0	2	25	0	0	0	0	0
	8:15 AM	2	9	1	0	8	0	0	0	1	1	0	2	24	0	0	0	1	1
	8:30 AM	2	8	1	3	5	0	0	0	1	3	1	1	25	0	0	0	0	0
	8:45 AM	1	12	1	0	6	0	0	0	0	0	0	0	20	0	0	0	0	0
	VOLUMES	7	145	12	6	56	2	2	0	6	13	1	9	259	0	0	0	2	2
	APPROACH %	4%	88%	7%	9%	88%	3%	25%	0%	75%	57%	4%	39%						
	APP/DEPART	164	/	156	64	/	73	8	/	20	23	/	10	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	1	107	6	3	29	2	2	0	4	7	0	4	165					
	APPROACH %	1%	94%	5%	9%	85%	6%	33%	0%	67%	64%	0%	36%						
	PEAK HR FACTOR		0.919			0.654			0.375			0.550		0.897					
	APP/DEPART	114	/	113	34	/	39	6	/	10	11	/	3	0					
PM	4:00 PM	0	18	1	1	17	0	0	0	0	5	0	3	45	0	0	0	0	0
	4:15 PM	0	14	0	1	16	0	0	1	0	0	0	5	37	0	0	0	0	0
	4:30 PM	0	21	0	3	18	0	0	0	0	2	1	1	46	0	0	0	0	0
	4:45 PM	0	17	2	0	12	1	0	0	1	0	0	0	33	0	0	0	0	0
	5:00 PM	0	19	3	0	10	0	0	0	0	3	0	0	35	0	0	0	0	0
	5:15 PM	1	11	0	1	12	0	1	0	1	1	0	0	28	0	0	0	0	0
	5:30 PM	2	20	0	1	16	0	1	1	0	0	0	1	42	0	0	0	0	0
	5:45 PM	1	15	0	0	12	1	0	0	1	1	0	1	32	0	0	0	0	0
	VOLUMES	4	135	6	7	113	2	2	2	3	12	1	11	298	0	0	0	0	0
	APPROACH %	3%	93%	4%	6%	93%	2%	29%	29%	43%	50%	4%	46%						
	APP/DEPART	145	/	148	122	/	128	7	/	15	24	/	7	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	70	3	5	63	1	0	1	1	7	1	9	161					
	APPROACH %	0%	96%	4%	7%	91%	1%	0%	50%	50%	41%	6%	53%						
	PEAK HR FACTOR		0.869			0.821			0.500			0.531		0.875					
	APP/DEPART	73	/	79	69	/	71	2	/	9	17	/	2	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Perris	PROJECT #:	SC4089
6/14/23	NORTH & SOUTH:	Webster	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Nance	CONTROL:	SIGNAL

	NOTES:												
PCE Adjusted	Class	1	2	3	4	5	6			AM PM MD OTHER OTHER		▲ N ◄ W E ► S ▼	
	Factor	1	1.5	2	3	3	3						

	NORTHBOUND (Webster)			SOUTHBOUND (Webster)			EASTBOUND (Nance)			WESTBOUND (Nance)			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	0	31	4	1	9	2	0	0	0	7	0	0	52
7:15 AM	0	28	2	3	6	0	1	0	5	2	0	0	46
7:30 AM	1	33	0	0	13	0	0	0	0	3	0	6	55
7:45 AM	0	24	2	3	14	2	1	0	1	0	0	2	48
8:00 AM	1	13	3	0	11	0	0	0	0	2	0	5	34
8:15 AM	3	9	1	0	11	0	0	0	1	2	0	4	31
8:30 AM	3	8	1	6	5	0	0	0	1	6	1	3	33
8:45 AM	1	15	1	0	10	0	0	0	0	0	0	0	27
AM VOLUMES	9	160	14	13	78	4	2	0	8	20	1	19	324
AM APPROACH %	5%	88%	7%	13%	83%	4%	21%	0%	79%	50%	3%	47%	
AM APP/DEPART	182	/	180	94	/	105	10	/	26	39	/	13	0
AM BEGIN PEAK HR		7:00 AM											
AM VOLUMES	1	115	8	7	41	4	2	0	6	11	0	7	200
AM APPROACH %	1%	93%	6%	14%	80%	7%	27%	0%	73%	60%	0%	40%	
AM PEAK HR FACTOR		0.895			0.678			0.341			0.547		0.917
AM APP/DEPART	124	/	124	52	/	57	8	/	15	18	/	5	0
4:00 PM	0	21	1	3	21	0	0	0	0	6	0	3	54
4:15 PM	0	14	0	2	17	0	0	2	0	0	0	9	44
4:30 PM	0	21	0	5	23	0	0	0	0	2	2	3	56
4:45 PM	0	18	2	0	13	1	0	0	2	0	0	0	36
5:00 PM	0	19	3	0	10	0	0	0	0	3	0	0	35
5:15 PM	2	12	0	3	17	0	1	0	1	1	0	0	36
5:30 PM	3	22	0	1	17	0	1	2	0	0	0	3	47
5:45 PM	1	17	0	0	13	2	0	0	1	1	0	1	35
PM VOLUMES	5	144	6	14	129	3	2	4	4	13	2	19	342
PM APPROACH %	3%	93%	4%	9%	89%	2%	21%	37%	42%	37%	6%	57%	
PM APP/DEPART	155	/	165	145	/	145	10	/	23	34	/	10	0
PM BEGIN PEAK HR		4:00 PM											
PM VOLUMES	0	74	3	10	73	1	0	2	2	8	2	15	189
PM APPROACH %	0%	96%	4%	11%	87%	1%	0%	50%	50%	31%	8%	61%	
PM PEAK HR FACTOR		0.875			0.759			0.500			0.681		0.851
PM APP/DEPART	77	/	89	84	/	83	4	/	15	25	/	3	0

INTERSECTION TURNING MOVEMENT COUNTS

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

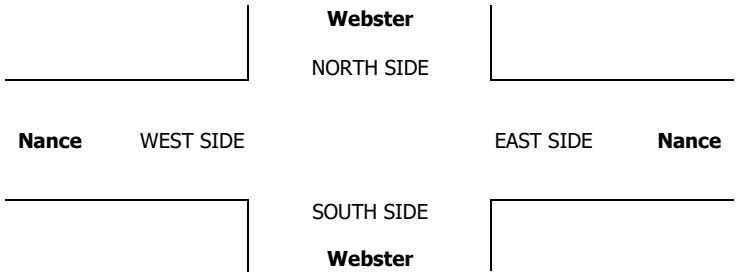
DATE:	LOCATION:	Perris	PROJECT #:	SC4089
6/14/23	NORTH & SOUTH:	Webster	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Nance	CONTROL:	SIGNAL

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Webster			SOUTHBOUND Webster			EASTBOUND Nance			WESTBOUND Nance				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	24	1	1	1	0	0	0	0	0	0	0	27	0	0	0	0	0
	7:15 AM	0	25	0	0	3	0	1	0	0	0	0	0	29	0	0	0	0	0
	7:30 AM	1	27	0	0	8	0	0	0	0	1	0	1	38	0	0	0	0	0
	7:45 AM	0	22	2	0	9	0	1	0	1	0	0	0	35	0	0	0	0	0
	8:00 AM	1	6	3	0	6	0	0	0	0	2	0	0	18	0	0	0	0	0
	8:15 AM	0	9	1	0	6	0	0	0	1	0	0	1	18	0	0	0	0	0
	8:30 AM	1	8	1	1	5	0	0	0	1	1	1	0	19	0	0	0	0	0
	8:45 AM	1	10	1	0	4	0	0	0	0	0	0	0	16	0	0	0	0	0
	VOLUMES	4	131	9	2	42	0	2	0	3	4	1	2	200	0	0	0	0	0
	APPROACH %	3%	91%	6%	5%	95%	0%	40%	0%	60%	57%	14%	29%						
	APP/DEPART	144	/	135	44	/	49	5	/	11	7	/	5	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	1	98	3	1	21	0	2	0	1	1	0	1	129					
	APPROACH %	1%	96%	3%	5%	95%	0%	67%	0%	33%	50%	0%	50%						
	PEAK HR FACTOR		0.911			0.611			0.375			0.250		0.849					
	APP/DEPART	102	/	101	22	/	23	3	/	4	2	/	1	0					
PM	4:00 PM	0	14	1	0	14	0	0	0	0	4	0	3	36	0	0	0	0	0
	4:15 PM	0	14	0	0	15	0	0	0	0	0	0	3	32	0	0	0	0	0
	4:30 PM	0	21	0	2	15	0	0	0	0	2	0	0	40	0	0	0	0	0
	4:45 PM	0	16	2	0	10	1	0	0	0	0	0	0	29	0	0	0	0	0
	5:00 PM	0	19	3	0	10	0	0	0	0	3	0	0	35	0	0	0	0	0
	5:15 PM	0	10	0	0	9	0	1	0	1	1	0	0	22	0	0	0	0	0
	5:30 PM	1	18	0	1	15	0	1	0	0	0	0	0	36	0	0	0	0	0
	5:45 PM	1	14	0	0	11	0	0	0	1	1	0	1	29	0	0	0	0	0
	VOLUMES	2	126	6	3	99	1	2	0	2	11	0	7	259	0	0	0	0	0
	APPROACH %	1%	94%	4%	3%	96%	1%	50%	0%	50%	61%	0%	39%						
	APP/DEPART	134	/	135	103	/	112	4	/	9	18	/	3	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	65	3	2	54	1	0	0	0	6	0	6	137					
	APPROACH %	0%	96%	4%	4%	95%	2%	0%	0%	0%	50%	0%	50%						
	PEAK HR FACTOR		0.810			0.838			0.000			0.429		0.856					
	APP/DEPART	68	/	71	57	/	60	0	/	5	12	/	1	0					



INTERSECTION TURNING MOVEMENT COUNTS

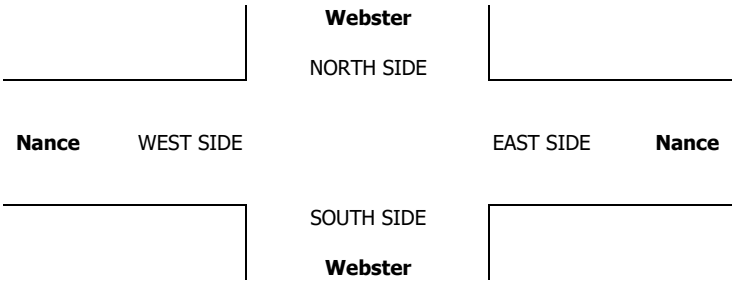
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Perris	PROJECT #:	SC4089
6/14/23	NORTH & SOUTH:	Webster	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Nance	CONTROL:	SIGNAL

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

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Webster			SOUTHBOUND Webster			EASTBOUND Nance			WESTBOUND Nance				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	1	2	0	1	1	0	0	0	3	0	0	8	0	0	0	0	0
7:15 AM	0	2	1	0	0	0	0	0	3	1	0	0	7	0	0	0	0	0
7:30 AM	0	2	0	0	1	0	0	0	0	1	0	1	5	0	0	0	1	1
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	3	0	0	0	0	0
8:15 AM	2	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	1	1
8:30 AM	1	0	0	1	0	0	0	0	0	1	0	0	3	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	3	7	3	1	3	1	0	0	3	7	0	3	31	0	0	0	2	2
APPROACH %	23%	54%	23%	20%	60%	20%	0%	0%	100%	70%	0%	30%						
APP/DEPART	13	/	10	5	/	11	3	/	6	10	/	4	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	6	3	0	2	1	0	0	3	4	0	2	22					
APPROACH %	0%	67%	33%	0%	67%	33%	0%	0%	100%	57%	0%	29%						
PEAK HR FACTOR		0.750			0.375			0.250			0.583		0.688					
APP/DEPART	9	/	8	3	/	9	3	/	4	7	/	1	0					
PM																		
4:00 PM	0	2	0	0	1	0	0	0	0	1	0	0	4	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
5:30 PM	1	1	0	0	1	0	0	1	0	0	0	0	4	0	0	0	0	0
5:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	0
VOLUMES	2	3	0	1	7	1	0	1	0	1	0	0	16	0	0	0	0	0
APPROACH %	40%	60%	0%	11%	78%	11%	0%	100%	0%	100%	0%	0%						
APP/DEPART	5	/	3	9	/	8	1	/	2	1	/	3	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	2	0	1	4	0	0	0	0	1	0	0	8					
APPROACH %	0%	100%	0%	20%	80%	0%	0%	0%	0%	100%	0%	0%						
PEAK HR FACTOR		0.250			0.625			0.000			0.250		0.500					
APP/DEPART	2	/	2	5	/	5	0	/	1	1	/	0	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

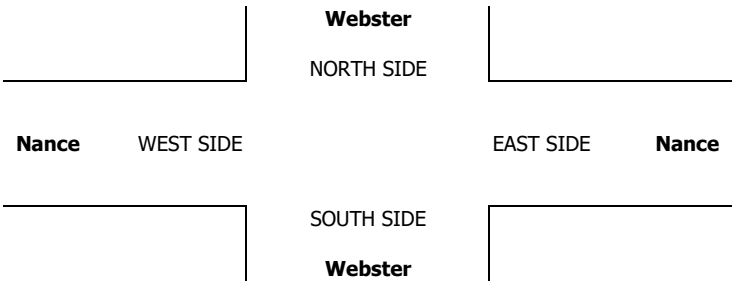
DATE:	LOCATION:	Perris	PROJECT #:	SC4089
6/14/23	NORTH & SOUTH:	Webster	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Nance	CONTROL:	SIGNAL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Webster			SOUTHBOUND Webster			EASTBOUND Nance			WESTBOUND Nance				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	1	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
VOLUMES	0	3	0	0	2	1	0	0	0	1	0	0	7	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	67%	33%	0%	0%	0%	100%	0%	0%						
APP/DEPART	3	/	3	3	/	3	0	/	0	1	/	1	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	1	0	0	1	1	0	0	0	1	0	0	4					
APPROACH %	0%	100%	0%	0%	50%	50%	0%	0%	0%	100%	0%	0%						
PEAK HR FACTOR		0.250			0.250			0.000			0.250		0.500					
APP/DEPART	1	/	1	2	/	2	0	/	0	1	/	1	0					
PM																		
4:00 PM	0	2	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	5	0	0	2	0	0	1	1	0	1	0	10	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	100%	0%	0%	50%	50%	0%	100%	0%						
APP/DEPART	5	/	5	2	/	3	2	/	1	1	/	1	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	3	0	0	2	0	0	1	1	0	1	0	8					
APPROACH %	0%	100%	0%	0%	100%	0%	0%	50%	50%	0%	100%	0%						
PEAK HR FACTOR		0.375			0.500			0.500			0.250		0.667					
APP/DEPART	3	/	3	2	/	3	2	/	1	1	/	1	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Perris	PROJECT #:	SC4089
6/14/23	NORTH & SOUTH:	Webster	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Nance	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Webster			SOUTHBOUND Webster			EASTBOUND Nance			WESTBOUND Nance				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
7:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0
7:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	3	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	3	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0	0	1	0	1	3	0	0	0	0	0
8:45 AM	0	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
VOLUMES	0	4	0	3	9	0	0	0	0	1	0	4	21	0	0	0	0	0
APPROACH %	0%	100%	0%	25%	75%	0%	0%	0%	0%	20%	0%	80%						
APP/DEPART	4	/	8	12	/	10	0	/	3	5	/	0	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	2	0	2	5	0	0	0	0	0	0	1	10					
APPROACH %	0%	100%	0%	29%	71%	0%	0%	0%	0%	0%	0%	100%						
PEAK HR FACTOR		0.500			0.875			0.000			0.250		0.833					
APP/DEPART	2	/	3	7	/	5	0	/	2	1	/	0	0					
PM																		
4:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0
4:30 PM	0	0	0	1	2	0	0	0	0	0	0	1	4	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	1	2	0	0	0	0	0	0	0	3	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
VOLUMES	0	1	0	3	5	0	0	0	0	0	0	4	13	0	0	0	0	0
APPROACH %	0%	100%	0%	38%	63%	0%	0%	0%	0%	0%	0%	100%						
APP/DEPART	1	/	5	8	/	5	0	/	3	4	/	0	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	0	0	2	3	0	0	0	0	0	0	3	8					
APPROACH %	0%	0%	0%	40%	60%	0%	0%	0%	0%	0%	0%	100%						
PEAK HR FACTOR		0.000			0.417			0.000			0.375		0.500					
APP/DEPART	0	/	3	5	/	3	0	/	2	3	/	0	0					

Webster NORTH SIDE

Nance WEST SIDE EAST SIDE **Nance**

SOUTH SIDE **Webster**

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Perris	PROJECT #:	SC4089
6/14/23	NORTH & SOUTH:	Webster	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Nance	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Webster			SOUTHBOUND Webster			EASTBOUND Nance			WESTBOUND Nance				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					

Webster

NORTH SIDE

Nance WEST SIDE EAST SIDE **Nance**

SOUTH SIDE

Webster

INTERSECTION TURNING MOVEMENT COUNTS

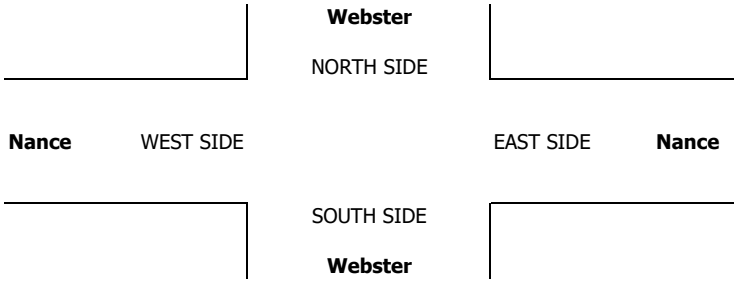
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Perris	PROJECT #:	SC4089
6/14/23	NORTH & SOUTH:	Webster	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Nance	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND (Webster)			SOUTHBOUND (Webster)			EASTBOUND (Nance)			WESTBOUND (Nance)				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
PM																		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					



APPENDIX D

LEVEL OF SERVICE WORKSHEETS

EXISTING

Nance Street Trailer Yard

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

Scenario 1 Existing AM Peak Hour
2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	WB Left	0.096	4.6	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 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	4.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.096

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	1	115	8	7	41	4	2	0	6	11	0	7
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	115	8	7	41	4	2	0	6	11	0	7
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
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	31	2	2	11	1	1	0	2	3	0	2
Total Analysis Volume [veh/h]	1	125	9	8	45	4	2	0	7	12	0	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	16	0	0	44	0	0	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	50	50	50	2	2
g / C, Green / Cycle	0.83	0.83	0.83	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.07	0.01	0.03	0.00	0.01
s, saturation flow rate [veh/h]	1874	1275	1873	1847	1790
c, Capacity [veh/h]	1619	211	1557	139	159
d1, Uniform Delay [s]	0.92	0.93	0.88	28.12	28.29
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	0.34	0.04	0.19	0.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.04	0.03	0.06	0.13
d, Delay for Lane Group [s/veh]	1.02	1.26	0.92	28.32	28.64
Lane Group LOS	A	A	A	C	C
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.05	0.02	0.02	0.13	0.29
50th-Percentile Queue Length [ft/ln]	1.22	0.49	0.41	3.23	7.19
95th-Percentile Queue Length [veh/ln]	0.09	0.04	0.03	0.23	0.52
95th-Percentile Queue Length [ft/ln]	2.19	0.89	0.73	5.81	12.94

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	1.02	1.02	1.02	1.26	0.92	0.92	28.32	28.32	28.32	28.64	28.64	28.64
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.02			0.96			28.32			28.64		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	4.62											
Intersection LOS	A											
Intersection V/C	0.096											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.826	1.997	1.703	1.722
Crosswalk LOS	A	A	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	399	399	1331	1331
d_b, Bicycle Delay [s]	19.24	19.24	3.36	3.36
l_b,int, Bicycle LOS Score for Intersection	1.782	1.654	1.574	1.593
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nance Street Trailer Yard

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

Scenario 1 Existing PM Peak Hour
2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	WB Right	0.075	5.1	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 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	5.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.075

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	74	3	10	73	1	0	2	2	8	2	15
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	74	3	10	73	1	0	2	2	8	2	15
Peak Hour Factor	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510
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	22	1	3	21	0	0	1	1	2	1	4
Total Analysis Volume [veh/h]	0	87	4	12	86	1	0	2	2	9	2	18
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	40	0	0	40	0	0	20	0	0	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49	3	3
g / C, Green / Cycle	0.82	0.82	0.82	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.05	0.01	0.05	0.01	0.02
s, saturation flow rate [veh/h]	1885	1326	1896	759	1743
c, Capacity [veh/h]	1605	1153	1554	96	161
d1, Uniform Delay [s]	1.03	0.99	1.03	27.37	27.75
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.02	0.07	0.18	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.01	0.06	0.04	0.18
d, Delay for Lane Group [s/veh]	1.10	1.00	1.09	27.55	28.28
Lane Group LOS	A	A	A	C	C
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.03	0.01	0.03	0.06	0.41
50th-Percentile Queue Length [ft/ln]	0.75	0.13	0.74	1.45	10.36
95th-Percentile Queue Length [veh/ln]	0.05	0.01	0.05	0.10	0.75
95th-Percentile Queue Length [ft/ln]	1.35	0.24	1.33	2.60	18.66

Movement, Approach, & Intersection Results

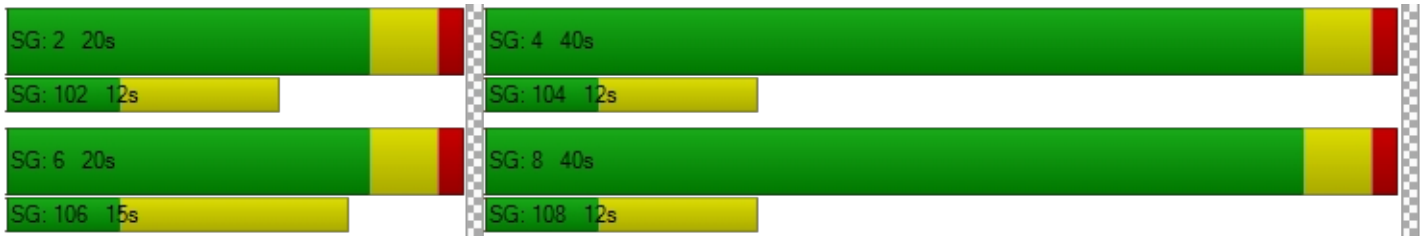
d_M, Delay for Movement [s/veh]	1.10	1.10	1.10	1.00	1.09	1.09	27.55	27.55	27.55	28.28	28.28	28.28
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.10			1.08			27.55			28.28		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	5.10											
Intersection LOS	A											
Intersection V/C	0.075											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.815	1.998	1.698	1.732
Crosswalk LOS	A	A	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1198	1198	533	533
d_b, Bicycle Delay [s]	4.83	4.83	16.18	16.18
l_b,int, Bicycle LOS Score for Intersection	1.710	1.723	1.566	1.607
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



EXISTING PLUS PROJECT

Nance Street Trailer Yard

Vistro File: G:\...\AME.vistro
Report File: G:\...\AMEP.pdf

Scenario 2 Existing Plus Project AM Peak Hour
2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Project Dwy 1 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.003	8.3	A
2	Project Dwy 2 (Auto Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.001	8.4	A
3	Project Dwy 3 (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	8.7	A
4	Project Dwy 4 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.013	8.7	A
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	EB Left	0.108	6.9	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: Project Dwy 1 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	8	0	0	5	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	3	0	0	0	0	0	0	1	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	0	0	0	0	8	0	1	5	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	0	0	0	0	2	0	0	1	0
Total Analysis Volume [veh/h]	0	0	3	0	0	0	0	8	0	1	5	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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]	8.59	9.09	8.34	8.60	9.08	8.32	7.21	0.00	0.00	7.22	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.21	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04
d_A, Approach Delay [s/veh]	8.34			8.67			0.00			1.20		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.90											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Project Dwy 2 (Auto Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	8	0	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	1	3	0	1	1
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	11	0	1	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	3	0	0	2
Total Analysis Volume [veh/h]	0	1	12	0	1	6
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]	8.60	8.35	0.00	0.00	7.22	0.00
Movement LOS	A	A	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]	0.07	0.07	0.00	0.00	0.04	0.04
d_A, Approach Delay [s/veh]	8.35		0.00		1.03	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.78					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Dwy 3 (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	8	0	0	5	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	8	1	0	0	0	4	0	4	2	1
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	8	1	0	0	0	12	0	4	7	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	2	0	0	0	0	3	0	1	2	0
Total Analysis Volume [veh/h]	0	0	8	1	0	0	0	13	0	4	7	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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	0.01	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]	8.69	9.18	8.38	8.71	9.16	8.34	7.21	0.00	0.00	7.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.56	0.56	0.56	0.08	0.08	0.08	0.00	0.00	0.00	0.17	0.17	0.17
d_A, Approach Delay [s/veh]	8.38			8.71			0.00			2.41		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.08											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 4: Project Dwy 4 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
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 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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	8	5	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	12	0	0	13	7	5
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]	12	0	0	21	12	5
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	0	6	3	1
Total Analysis Volume [veh/h]	13	0	0	22	13	5
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	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.72	8.41	7.23	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.01	1.01	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.72		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.14					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	6.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.108

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	1	115	8	7	41	4	2	0	6	11	0	7
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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]	1	0	0	0	0	11	24	0	1	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	115	8	7	41	15	26	0	7	11	0	7
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
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	31	2	2	11	4	7	0	2	3	0	2
Total Analysis Volume [veh/h]	2	125	9	8	45	16	28	0	8	12	0	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	16	0	0	44	0	0	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49	3	3
g / C, Green / Cycle	0.81	0.81	0.81	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.07	0.01	0.03	0.02	0.01
s, saturation flow rate [veh/h]	1875	1275	1816	1707	1771
c, Capacity [veh/h]	1583	302	1474	201	194
d1, Uniform Delay [s]	1.15	1.14	1.10	27.39	27.16
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.16	0.05	0.42	0.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.09	0.03	0.04	0.18	0.10
d, Delay for Lane Group [s/veh]	1.26	1.30	1.16	27.82	27.39
Lane Group LOS	A	A	A	C	C
Critical Lane Group	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.05	0.01	0.02	0.51	0.28
50th-Percentile Queue Length [ft/ln]	1.23	0.34	0.56	12.65	6.95
95th-Percentile Queue Length [veh/ln]	0.09	0.02	0.04	0.91	0.50
95th-Percentile Queue Length [ft/ln]	2.21	0.62	1.01	22.76	12.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	1.26	1.26	1.26	1.30	1.16	1.16	27.82	27.82	27.82	27.39	27.39	27.39
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.26			1.17			27.82			27.39		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	6.90											
Intersection LOS	A											
Intersection V/C	0.108											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.827	2.048	1.720	1.722
Crosswalk LOS	A	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	399	399	1331	1331
d_b, Bicycle Delay [s]	19.24	19.24	3.36	3.36
l_b,int, Bicycle LOS Score for Intersection	1.784	1.673	1.619	1.593
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nance Street Trailer Yard

Vistro File: G:\...\PME.vistro
Report File: G:\...\PMEP.pdf

Scenario 2 Existing Plus Project PM Peak Hour
2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Project Dwy 1 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.002	8.3	A
2	Project Dwy 2 (Auto Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.002	8.3	A
3	Project Dwy 3 (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.002	8.8	A
4	Project Dwy 4 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.007	8.7	A
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	WB Right	0.096	6.7	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: Project Dwy 1 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	4	0	0	3	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	2	0	0	0	0	0	0	3	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	0	0	0	0	4	0	3	3	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	0	0	0	0	1	0	1	1	0
Total Analysis Volume [veh/h]	0	0	2	0	0	0	0	4	0	3	3	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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]	8.58	9.08	8.32	8.59	9.07	8.31	7.21	0.00	0.00	7.21	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.14	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.13	0.13
d_A, Approach Delay [s/veh]	8.32			8.66			0.00			3.61		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.19											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Project Dwy 2 (Auto Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	4	0	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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	2	2	0	2	3
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	2	6	0	2	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	0	1	2
Total Analysis Volume [veh/h]	0	2	6	0	2	6
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]	8.58	8.33	0.00	0.00	7.21	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.14	0.14	0.00	0.00	0.08	0.08
d_A, Approach Delay [s/veh]	8.33		0.00		1.80	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.94					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Dwy 3 (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	4	0	0	3	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	5	2	0	0	0	4	0	10	5	2
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	5	2	0	0	0	8	0	10	8	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	0	3	2	1
Total Analysis Volume [veh/h]	0	0	5	2	0	0	0	8	0	11	8	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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	0.00	0.00
d_M, Delay for Movement [s/veh]	8.75	9.25	8.35	8.77	9.24	8.35	7.22	0.00	0.00	7.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.35	0.35	0.35	0.16	0.16	0.16	0.00	0.00	0.00	0.48	0.48	0.48
d_A, Approach Delay [s/veh]	8.35			8.77			0.00			3.79		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.86											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 4: Project Dwy 4 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
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 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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	4	3	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	7	0	0	11	18	13
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]	7	0	0	15	21	13
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	0	4	6	3
Total Analysis Volume [veh/h]	7	0	0	16	22	14
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	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.74	8.45	7.27	0.00	0.00	0.00
Movement LOS	A	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]	0.54	0.54	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.74		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.04					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.096

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	74	3	10	73	1	0	2	2	8	2	15
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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]	2	0	0	0	0	28	15	1	2	0	1	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	74	3	10	73	29	15	3	4	8	3	15
Peak Hour Factor	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510
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	22	1	3	21	9	4	1	1	2	1	4
Total Analysis Volume [veh/h]	2	87	4	12	86	34	18	4	5	9	4	18
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	40	0	0	40	0	0	20	0	0	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49	3	3
g / C, Green / Cycle	0.82	0.82	0.82	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.05	0.01	0.07	0.02	0.02
s, saturation flow rate [veh/h]	1881	1326	1810	1790	1803
c, Capacity [veh/h]	1599	741	1479	189	167
d1, Uniform Delay [s]	1.06	1.06	1.08	27.58	27.65
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.04	0.11	0.34	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.02	0.08	0.14	0.19
d, Delay for Lane Group [s/veh]	1.13	1.10	1.18	27.92	28.18
Lane Group LOS	A	A	A	C	C
Critical Lane Group	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.03	0.01	0.04	0.38	0.44
50th-Percentile Queue Length [ft/ln]	0.77	0.21	1.10	9.51	11.04
95th-Percentile Queue Length [veh/ln]	0.06	0.01	0.08	0.68	0.80
95th-Percentile Queue Length [ft/ln]	1.39	0.37	1.99	17.12	19.88

Movement, Approach, & Intersection Results

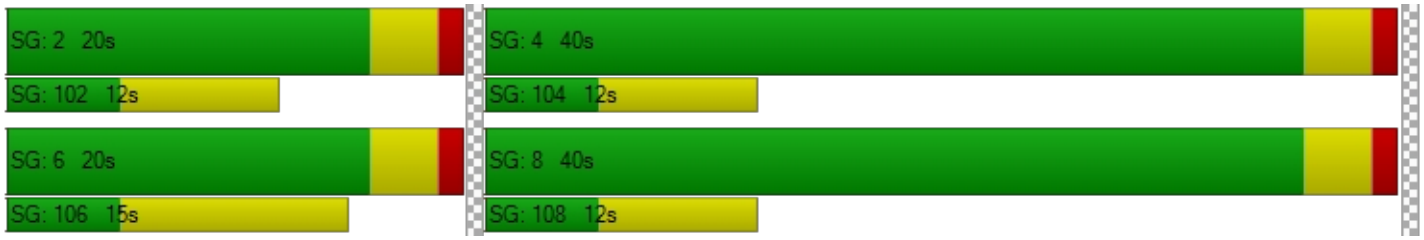
d_M, Delay for Movement [s/veh]	1.13	1.13	1.13	1.10	1.18	1.18	27.92	27.92	27.92	28.18	28.18	28.18
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.13			1.18			27.92			28.18		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	6.67											
Intersection LOS	A											
Intersection V/C	0.096											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.818	2.043	1.726	1.733
Crosswalk LOS	A	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1198	1198	533	533
d_b, Bicycle Delay [s]	4.83	4.83	16.18	16.18
l_b,int, Bicycle LOS Score for Intersection	1.713	1.777	1.604	1.611
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



OPENING YEAR (2026) WITHOUT PROJECT

Nance Street Trailer Yard

Vistro File: G:\...\AME.vistro

Scenario 3 Opening Year (2026) Without Project AM Peak Hour

Report File: G:\...\AMOYWO.pdf

2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	WB Left	0.130	3.5	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 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	3.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.130

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	1	115	8	7	41	4	2	0	6	11	0	7
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	42	0	0	60	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	164	8	7	103	4	2	0	6	12	0	7
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
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	45	2	2	28	1	1	0	2	3	0	2
Total Analysis Volume [veh/h]	1	179	9	8	112	4	2	0	7	13	0	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	16	0	0	44	0	0	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	50	50	50	2	2
g / C, Green / Cycle	0.83	0.83	0.83	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.06	0.00	0.01
s, saturation flow rate [veh/h]	1881	1214	1889	1846	1784
c, Capacity [veh/h]	1621	206	1568	141	163
d1, Uniform Delay [s]	0.97	0.95	0.93	28.04	28.23
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	0.35	0.09	0.19	0.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.04	0.07	0.06	0.13
d, Delay for Lane Group [s/veh]	1.11	1.30	1.02	28.23	28.58
Lane Group LOS	A	A	A	C	C
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.07	0.02	0.04	0.13	0.30
50th-Percentile Queue Length [ft/ln]	1.77	0.51	1.00	3.22	7.53
95th-Percentile Queue Length [veh/ln]	0.13	0.04	0.07	0.23	0.54
95th-Percentile Queue Length [ft/ln]	3.18	0.91	1.80	5.80	13.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	1.11	1.11	1.11	1.30	1.02	1.02	28.23	28.23	28.23	28.58	28.58	28.58
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.11			1.04			28.23			28.58		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	3.48											
Intersection LOS	A											
Intersection V/C	0.130											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.897	2.042	1.703	1.722
Crosswalk LOS	A	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	399	399	1331	1331
d_b, Bicycle Delay [s]	19.24	19.24	3.36	3.36
l_b,int, Bicycle LOS Score for Intersection	1.871	1.764	1.574	1.594
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nance Street Trailer Yard

Vistro File: G:\...\PME.vistro
Scenario 3 Opening Year (2026) Without Project PM Peak Hour

Report File: G:\...\PMOYWO.pdf
2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	WB Right	0.125	3.7	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 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	3.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.125

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	74	3	10	73	1	0	2	2	8	2	15
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	65	0	0	50	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	144	3	11	127	1	0	2	2	8	2	16
Peak Hour Factor	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510
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	1	3	37	0	0	1	1	2	1	5
Total Analysis Volume [veh/h]	0	169	4	13	149	1	0	2	2	9	2	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	40	0	0	40	0	0	20	0	0	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49	3	3
g / C, Green / Cycle	0.82	0.82	0.82	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.09	0.01	0.08	0.01	0.02
s, saturation flow rate [veh/h]	1892	1231	1898	795	1737
c, Capacity [veh/h]	1609	1065	1553	98	162
d1, Uniform Delay [s]	1.09	1.00	1.08	27.30	27.70
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.02	0.12	0.17	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.01	0.10	0.04	0.19
d, Delay for Lane Group [s/veh]	1.23	1.02	1.20	27.47	28.25
Lane Group LOS	A	A	A	C	C
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.06	0.01	0.05	0.06	0.43
50th-Percentile Queue Length [ft/ln]	1.51	0.15	1.34	1.44	10.71
95th-Percentile Queue Length [veh/ln]	0.11	0.01	0.10	0.10	0.77
95th-Percentile Queue Length [ft/ln]	2.71	0.28	2.40	2.60	19.28

Movement, Approach, & Intersection Results

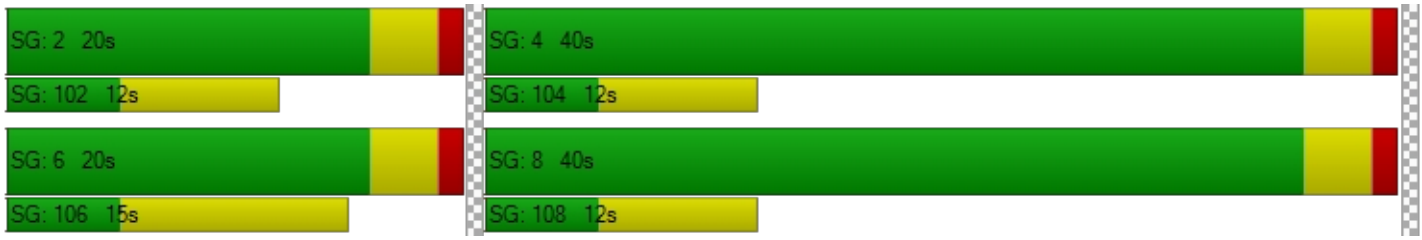
d_M, Delay for Movement [s/veh]	1.23	1.23	1.23	1.02	1.20	1.20	27.47	27.47	27.47	28.25	28.25	28.25
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.23			1.19			27.47			28.25		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	3.68											
Intersection LOS	A											
Intersection V/C	0.125											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.898	2.054	1.698	1.734
Crosswalk LOS	A	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1198	1198	533	533
d_b, Bicycle Delay [s]	4.83	4.83	16.18	16.18
l_b,int, Bicycle LOS Score for Intersection	1.845	1.829	1.566	1.609
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



OPENING YEAR (2026) WITH PROJECT

Nance Street Trailer Yard

Vistro File: G:\...\AME.vistro
Report File: G:\...\AMOYW.pdf

Scenario 4 Opening Year (2026) With Project AM Peak Hour
2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Project Dwy 1 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.003	8.3	A
2	Project Dwy 2 (Auto Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.001	8.4	A
3	Project Dwy 3 (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	8.7	A
4	Project Dwy 4 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.013	8.7	A
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	EB Left	0.141	5.2	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: Project Dwy 1 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	8	0	0	5	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	3	0	0	0	0	0	0	1	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	0	0	0	0	8	0	1	5	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	0	0	0	0	2	0	0	1	0
Total Analysis Volume [veh/h]	0	0	3	0	0	0	0	8	0	1	5	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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]	8.59	9.09	8.34	8.60	9.08	8.32	7.21	0.00	0.00	7.22	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.21	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04
d_A, Approach Delay [s/veh]	8.34			8.67			0.00			1.20		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.90											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Project Dwy 2 (Auto Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	8	0	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	3	0	1	1
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	11	0	1	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	3	0	0	2
Total Analysis Volume [veh/h]	0	1	12	0	1	6
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]	8.60	8.35	0.00	0.00	7.22	0.00
Movement LOS	A	A	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]	0.07	0.07	0.00	0.00	0.04	0.04
d_A, Approach Delay [s/veh]	8.35		0.00		1.03	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.78					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Dwy 3 (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	8	0	0	5	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	1	0	0	0	4	0	4	2	1
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	8	1	0	0	0	12	0	4	7	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	2	0	0	0	0	3	0	1	2	0
Total Analysis Volume [veh/h]	0	0	8	1	0	0	0	13	0	4	7	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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	0.01	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]	8.69	9.18	8.38	8.71	9.16	8.34	7.21	0.00	0.00	7.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.56	0.56	0.56	0.08	0.08	0.08	0.00	0.00	0.00	0.17	0.17	0.17
d_A, Approach Delay [s/veh]	8.38			8.71			0.00			2.41		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.08											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 4: Project Dwy 4 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
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 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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	8	5	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	0	13	7	5
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]	12	0	0	21	12	5
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	0	6	3	1
Total Analysis Volume [veh/h]	13	0	0	22	13	5
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	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.72	8.41	7.23	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.01	1.01	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.72		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.14					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	5.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.141

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	1	115	8	7	41	4	2	0	6	11	0	7
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	42	0	0	60	11	24	0	1	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	164	8	7	103	15	26	0	7	12	0	7
Peak Hour Factor	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170	0.9170
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	45	2	2	28	4	7	0	2	3	0	2
Total Analysis Volume [veh/h]	2	179	9	8	112	16	28	0	8	13	0	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	16	0	0	44	0	0	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49	3	3
g / C, Green / Cycle	0.81	0.81	0.81	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.10	0.01	0.07	0.02	0.01
s, saturation flow rate [veh/h]	1881	1214	1859	1710	1770
c, Capacity [veh/h]	1587	237	1509	201	195
d1, Uniform Delay [s]	1.19	1.15	1.15	27.39	27.17
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	0.27	0.11	0.42	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.03	0.08	0.18	0.11
d, Delay for Lane Group [s/veh]	1.34	1.42	1.26	27.81	27.41
Lane Group LOS	A	A	A	C	C
Critical Lane Group	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.07	0.02	0.05	0.51	0.29
50th-Percentile Queue Length [ft/ln]	1.77	0.44	1.21	12.64	7.30
95th-Percentile Queue Length [veh/ln]	0.13	0.03	0.09	0.91	0.53
95th-Percentile Queue Length [ft/ln]	3.19	0.79	2.17	22.76	13.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	1.34	1.34	1.34	1.42	1.26	1.26	27.81	27.81	27.81	27.41	27.41	27.41
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.34			1.27			27.81			27.41		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	5.23											
Intersection LOS	A											
Intersection V/C	0.141											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.898	2.094	1.720	1.722
Crosswalk LOS	A	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	399	399	1331	1331
d_b, Bicycle Delay [s]	19.24	19.24	3.36	3.36
l_b,int, Bicycle LOS Score for Intersection	1.873	1.784	1.619	1.594
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nance Street Trailer Yard

Vistro File: G:\...\PME.vistro
Report File: G:\...\PMOYW.pdf

Scenario 4 Opening Year (2026) With Project PM Peak Hour
2/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Project Dwy 1 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.002	8.3	A
2	Project Dwy 2 (Auto Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	NB Right	0.002	8.3	A
3	Project Dwy 3 (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.002	8.8	A
4	Project Dwy 4 (Truck Only) (NS) at Nance St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.007	8.7	A
5	Webster Ave (NS) at Nance St (EW)	Signalized	HCM 7th Edition	WB Right	0.135	5.0	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: Project Dwy 1 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	4	0	0	3	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	2	0	0	0	0	0	0	3	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	0	0	0	0	4	0	3	3	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	0	0	0	0	1	0	1	1	0
Total Analysis Volume [veh/h]	0	0	2	0	0	0	0	4	0	3	3	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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]	8.58	9.08	8.32	8.59	9.07	8.31	7.21	0.00	0.00	7.21	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.14	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.13	0.13
d_A, Approach Delay [s/veh]	8.32			8.66			0.00			3.61		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.19											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Project Dwy 2 (Auto Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	4	0	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	2	0	2	3
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	2	6	0	2	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	0	1	2
Total Analysis Volume [veh/h]	0	2	6	0	2	6
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]	8.58	8.33	0.00	0.00	7.21	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.14	0.14	0.00	0.00	0.08	0.08
d_A, Approach Delay [s/veh]	8.33		0.00		1.80	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.94					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Dwy 3 (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name											
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	4	0	0	3	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	2	0	0	0	4	0	10	5	2
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	5	2	0	0	0	8	0	10	8	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
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	0	3	2	1
Total Analysis Volume [veh/h]	0	0	5	2	0	0	0	8	0	11	8	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	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	0.00	0.00
d_M, Delay for Movement [s/veh]	8.75	9.25	8.35	8.77	9.24	8.35	7.22	0.00	0.00	7.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.35	0.35	0.35	0.16	0.16	0.16	0.00	0.00	0.00	0.48	0.48	0.48
d_A, Approach Delay [s/veh]	8.35			8.77			0.00			3.79		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.86											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 4: Project Dwy 4 (Truck Only) (NS) at Nance St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
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 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]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	4	3	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	11	18	13
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]	7	0	0	15	21	13
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	0	4	6	3
Total Analysis Volume [veh/h]	7	0	0	16	22	14
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	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.74	8.45	7.27	0.00	0.00	0.00
Movement LOS	A	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]	0.54	0.54	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.74		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.04					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Webster Ave (NS) at Nance St (EW)

Control Type:	Signalized	Delay (sec / veh):	5.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.135

Intersection Setup

Name												
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	1	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]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	74	3	10	73	1	0	2	2	8	2	15
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609	1.0609
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	65	0	0	50	28	15	1	2	0	1	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	144	3	11	127	29	15	3	4	8	3	16
Peak Hour Factor	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510	0.8510
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	42	1	3	37	9	4	1	1	2	1	5
Total Analysis Volume [veh/h]	2	169	4	13	149	34	18	4	5	9	4	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	16	0	0	44	0	0	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	7	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	C	C
C, Cycle Length [s]	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49	3	3
g / C, Green / Cycle	0.82	0.82	0.82	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.09	0.01	0.10	0.02	0.02
s, saturation flow rate [veh/h]	1889	1231	1840	1788	1796
c, Capacity [veh/h]	1602	239	1501	191	168
d1, Uniform Delay [s]	1.12	1.15	1.13	27.51	27.60
k, delay calibration	0.50	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.14	0.43	0.17	0.34	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.05	0.12	0.14	0.19
d, Delay for Lane Group [s/veh]	1.26	1.59	1.30	27.85	28.14
Lane Group LOS	A	A	A	C	C
Critical Lane Group	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.06	0.03	0.07	0.38	0.46
50th-Percentile Queue Length [ft/ln]	1.60	0.72	1.73	9.49	11.39
95th-Percentile Queue Length [veh/ln]	0.12	0.05	0.12	0.68	0.82
95th-Percentile Queue Length [ft/ln]	2.88	1.29	3.12	17.09	20.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	1.26	1.26	1.26	1.59	1.30	1.30	27.85	27.85	27.85	28.14	28.14	28.14
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	1.26			1.31			27.85			28.14		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	4.95											
Intersection LOS	A											
Intersection V/C	0.135											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.72	21.72	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersection	1.901	2.099	1.726	1.736
Crosswalk LOS	A	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	399	399	1331	1331
d_b, Bicycle Delay [s]	19.24	19.24	3.36	3.36
l_b,int, Bicycle LOS Score for Intersection	1.848	1.883	1.604	1.612
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX E

GATE STACKING WORKSHEETS

Table A-1
Gate Stacking Analysis[1]

PROJECT:	Nance Street Trailer Yard		DATE:	2024-0215
LOCATION:	Project Driveway 1 (Truck Only) at Nance Steet		JN:	19599

Gate Distribution: 100%	AM		PM	
	INBOUND	OUTBOUND	INBOUND	OUTBOUND
	1	1	1	1
DEMAND RATE (q) (veh/hr)	1	1	1	1
SERVICE RATE (Q) (veh/hr/channel)[2]	60	60	60	60
NO. OF SERVICE POSITIONS (N)	1	1	1	1
NO. OF STORAGE LANES (N1)	1	1	1	1
PROBABILITY OF NOT EXCEEDING (P) [3]	0.05	0.05	0.05	0.05
	P'=95%	P'=95%	P'=95%	P'=95%
UTILIZATION FACTOR (q/(N*Q))	0.02	0.02	0.02	0.02
LENGTH OF QUEUED VEHICLE (L) FEET	75	75	75	75
LENGTH OF SERVICE VEHICLE (L) FEET	75	75	75	75
Q(M) VALUE [4]	0.02	0.02	0.02	0.02
NO. OF VEHICLES BEING SERVED (N)	1.00	1.00	1.00	1.00
NO. OF VEHICLES IN QUEUE (M)	-1.26	-1.26	-1.26	-1.26
M = ((LN(P) - LN(Q(M))/LN(p)) - 1	~0	~0	~0	~0
TOTAL NUMBER OF VEHICLES (N+M)	1.00	1.00	1.00	1.00
	~1	~1	~1	~1
NO. OF VEHICLES IN EACH LANE	1.00	1.00	1.00	1.00
PER LANE ((N+M)/N1)[5]	1	1	1	1
LENGTH OF QUEUE (L) FEET	75	75	75	75

Notes:

(1) Source: *Transportation and Land Development* (Institute of Transportation Engineers, 1988).

(2) Service rates obtained from *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972). However, the lowest entering maximum hourly capacity is 175 vehicles/hour for a coin operated gate. To provide for a conservative analysis, an entering maximum hourly capacity of 60 vehicles/hour

(3) P' = confidence interval; probability that queue will not exceed the calculated value.

(4) Q(M) = interpolated table values based on number of service channels (N) and utilization factor (q/NQ) per Table 8-11 (p.231) of *Transportation And Land Development*.

(5) Fractional vehicles are rounded up.

Table A-2
Gate Stacking Analysis[1]

PROJECT:	Nance Street Trailer Yard		DATE:	2024-0215
LOCATION:	Project Driveway 3 at Nance Steet		JN:	19599

Gate Distribution: 100%	AM		PM	
	INBOUND	OUTBOUND	INBOUND	OUTBOUND
	1	4	4	2
DEMAND RATE (q) (veh/hr)	1	4	4	2
SERVICE RATE (Q) (veh/hr/channel)[2]	60	60	60	60
NO. OF SERVICE POSITIONS (N)	1	1	1	1
NO. OF STORAGE LANES (N1)	1	1	1	1
PROBABILITY OF NOT EXCEEDING (P) [3]	0.05	0.05	0.05	0.05
	P'=95%	P'=95%	P'=95%	P'=95%
UTILIZATION FACTOR (q/(N*Q))	0.02	0.07	0.07	0.03
LENGTH OF QUEUED VEHICLE (L) FEET	75	75	75	75
LENGTH OF SERVICE VEHICLE (L) FEET	75	75	75	75
Q(M) VALUE [4]	0.02	0.07	0.07	0.03
NO. OF VEHICLES BEING SERVED (N)	1.00	1.00	1.00	1.00
NO. OF VEHICLES IN QUEUE (M)	-1.26	-0.89	-0.89	-1.12
M = ((LN(P) - LN(Q(M))/LN(p)) - 1	~0	~0	~0	~0
TOTAL NUMBER OF VEHICLES (N+M)	1.00	1.00	1.00	1.00
	~1	~1	~1	~1
NO. OF VEHICLES IN EACH LANE	1.00	1.00	1.00	1.00
PER LANE ((N+M)/N1)[5]	1	1	1	1
LENGTH OF QUEUE (L) FEET	75	75	75	75

Notes:

(1) Source: *Transportation and Land Development* (Institute of Transportation Engineers, 1988).

(2) Service rates obtained from *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972). However, the lowest entering maximum hourly capacity is 175 vehicles/hour for a coin operated gate. To provide for a conservative analysis, an entering maximum hourly capacity of 60 vehicles/hour .

(3) P' = confidence interval; probability that queue will not exceed the calculated value.

(4) Q(M) = interpolated table values based on number of service channels (N) and utilization factor (q/NQ) per Table 8-11 (p.231) of *Transportation And Land Development*.

(5) Fractional vehicles are rounded up.

Table A-3
Gate Stacking Analysis[1]

PROJECT:	Nance Street Trailer Yard	DATE:	2024-0215
LOCATION:	Project Driveway 4 (Truck Only) at Nance Steet	JN:	19599

Gate Distribution: 100%	AM		PM	
	INBOUND	OUTBOUND	INBOUND	OUTBOUND
	2	5	6	3
DEMAND RATE (q) (veh/hr)	2	5	6	3
SERVICE RATE (Q) (veh/hr/channel)[2]	60	60	60	60
NO. OF SERVICE POSITIONS (N)	1	1	1	1
NO. OF STORAGE LANES (N1)	1	1	1	1
PROBABILITY OF NOT EXCEEDING (P) [3]	0.05	0.05	0.05	0.05
	P'=95%	P'=95%	P'=95%	P'=95%
UTILIZATION FACTOR (q/(N*Q))	0.03	0.08	0.10	0.05
LENGTH OF QUEUED VEHICLE (L) FEET	75	75	75	75
LENGTH OF SERVICE VEHICLE (L) FEET	75	75	75	75
Q(M) VALUE [4]	0.03	0.08	0.00	0.05
NO. OF VEHICLES BEING SERVED (N)	1.00	1.00	1.00	1.00
NO. OF VEHICLES IN QUEUE (M)	-1.12	-0.80	-0.70	-1.00
M = ((LN(P) - LN(Q(M))/LN(p)) - 1	~0	~0	~0	~0
TOTAL NUMBER OF VEHICLES (N+M)	1.00	1.00	1.00	1.00
	~1	~1	~1	~1
NO. OF VEHICLES IN EACH LANE	1.00	1.00	1.00	1.00
PER LANE ((N+M)/N1)[5]	1	1	1	1
LENGTH OF QUEUE (L) FEET	75	75	75	75

Notes:

(1) Source: *Transportation and Land Development* (Institute of Transportation Engineers, 1988).

(2) Service rates obtained from *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972). However, the lowest entering maximum hourly capacity is 175 vehicles/hour for a coin operated gate. To provide for a conservative analysis, an entering maximum hourly capacity of 60 vehicles/hour .

(3) P' = confidence interval; probability that queue will not exceed the calculated value.

(4) Q(M) = interpolated table values based on number of service channels (N) and utilization factor (q/NQ) per Table 8-11 (p.231) of *Transportation And Land Development*.

(5) Fractional vehicles are rounded up.

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