BROWN STRAUSS BANNING INDUSTRIAL PROJECT TRAFFIC IMPACT ANALYSIS

City of Banning

October 27, 2023

gandini

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

BROWN STRAUSS BANNING INDUSTRIAL PROJECT TRAFFIC IMPACT ANALYSIS

City of Banning

October 27, 2023

prepared by

Bryan Crawford
Giancarlo Ganddini, PE, PTP

GANDDINI GROUP, INC.
555 Parkcenter Drive, Suite 225
Santa Ana, California 92705
(714) 795-3100 | ganddini.com

Project No. 19588

TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

The approximately 14.92-acre project site is located at 1219 and 1431 West Lincoln Street (APNs 540-180-020, -022, and -026) in the City of Banning, California.

The currently vacant site is proposed to be developed with a steel distribution use. The total development proposal includes a 45,000 square foot warehouse, a 3,000 square foot office, two 500 square foot enclosed saw sheds, and an outdoor storage yard. The project also involves a General Plan Amendment/Zone Change for a portion of the site from Industrial (I) and General Commercial (CC) to Industrial (I).

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 existing Brown Strauss facility currently generates approximately 191 daily vehicle trips, including 22 vehicle trips during the AM peak hour and 10 vehicle trips during the PM peak hour. The existing Brown Strauss facility currently generates approximately 343 daily PCE trips, including 43 PCE trips during the AM peak hour and 16 PCE trips during the PM peak hour.

The existing Brown Strauss Steel operation located at 14970 Jurupa Avenue in the City of Fontana will be closed with operations moved to this City of Banning location. The City of Fontana location is 23.0-acres which is larger than the 14.92-acre project site. This traffic impact analysis uses the trip generation for the 23-acre site without adjustment for the proposed 14.92-acre site. This will provide for a conservative analysis while conforming with the intent that the project is moving operations and operations will remain similarly to existing status, even if the new location has a smaller square footage.

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 Opening Year Conditions With Project (2025), except for the following study intersection that is forecast to continue operating at unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

The addition of project trips does not cause the net change in delay at the study intersections to exceed the City-established criteria; therefore, the proposed project is forecast to cause no substantial operational deficiencies at the study intersections for Opening Year Conditions With Project (2025).

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Cumulative Conditions With Project (2025), except for the following study intersection that is forecast to operate at unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

The addition of project trips does not cause the net change in delay at the study intersections to exceed the City-established criteria; therefore, the proposed project is forecast to cause no substantial operational deficiencies at the study intersections for Cumulative Conditions With Project (2025).

General Plan Amendment Analysis

Since maximum potential buildout of APN 540-180-022 is forecast to generate fewer trips with the proposed Industrial (I) land use designation compared to the existing General Commercial (GC) land use designation, the proposed General Plan Amendment would not exceed impacts associated with buildout of the current General Plan.

Site Access & Circulation

It is recommended that the entrance gate at the Project West Driveway is either moved north into the project site to allow for at least 100 feet of queuing capacity from Lincoln Street or always remain open during operating hours so that trucks do not need to wait for the gate to open.

Based on the relatively low turning movement volumes generated by the project, separation of passenger car and truck accesses, and separation of inbound and outbound trucks, the proposed project driveways are expected to function adequately.

1. INTRODUCTION

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

PURPOSE AND OBJECTIVES

The purpose of this study is to evaluate the potential for transportation impacts resulting from development of the proposed project in the context of the City of Banning's discretionary authority for conformance with locally established operational standard. 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 Banning staff and in accordance with the procedures and methodologies for assessing transportation impacts established by the City of Banning. 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, the project's vehicle miles traveled (VMT) impact is documented separately in the *Brown Strauss Banning Industrial Project Vehicle Miles Traveled Screening Assessment* (Ganddini Group, Inc., April 2023).

PROJECT DESCRIPTION

The approximately 14.92-acre project site is located at 1219 and 1431 West Lincoln Street (APNs 540-180-020, -022, and -026) in the City of Banning, California. Figure 1 shows the project location map.

The currently vacant site is proposed to be developed with a steel distribution use. The total development proposal includes a 45,000 square foot warehouse, a 3,000 square foot office, two 500 square foot enclosed saw sheds, and an outdoor storage yard. The project also involves a General Plan Amendment/Zone Change for a portion of the site from Industrial (I) and General Commercial (CC) to Industrial (I). Figure 2 illustrates the project site plan.

The project site is proposed to provide four access driveways on West Lincoln Street. The project west driveway will be a truck entrance only driveway. The project central-west driveway will be a full access automobile only driveway. The project central-east and east driveways will be truck exit only driveways. For purposes of this analysis, the proposed project is anticipated to be constructed and fully operational by year 2025.

Brown Strauss Steel currently operates a larger facility located at 14970 Jurupa Avenue in the City of Fontana. If the proposed Banning project is approved, the existing operation in Fontana will be closed and its operations will be moved to the proposed Banning location.

SCOPE OF ANALYSIS

The scope of this analysis was determined in consultation with City of Banning 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 Banning jurisdiction:

Study Intersections[1]	Jurisdiction
1. 22nd Street (NS) at Lincoln Street (EW)	City of Banning
2. Project West Driveway (NS) at Lincoln Street (EW)	City of Banning
3. Project Central-West Driveway (NS) at Lincoln Street (EW)	City of Banning
4. Project Central-East Driveway (NS) at Lincoln Street (EW)	City of Banning
5. Project East Driveway/12th Street (NS) at Lincoln Street (EW)	City of Banning
6. 8th Street (NS) at Lincoln Street (EW)	City of Banning

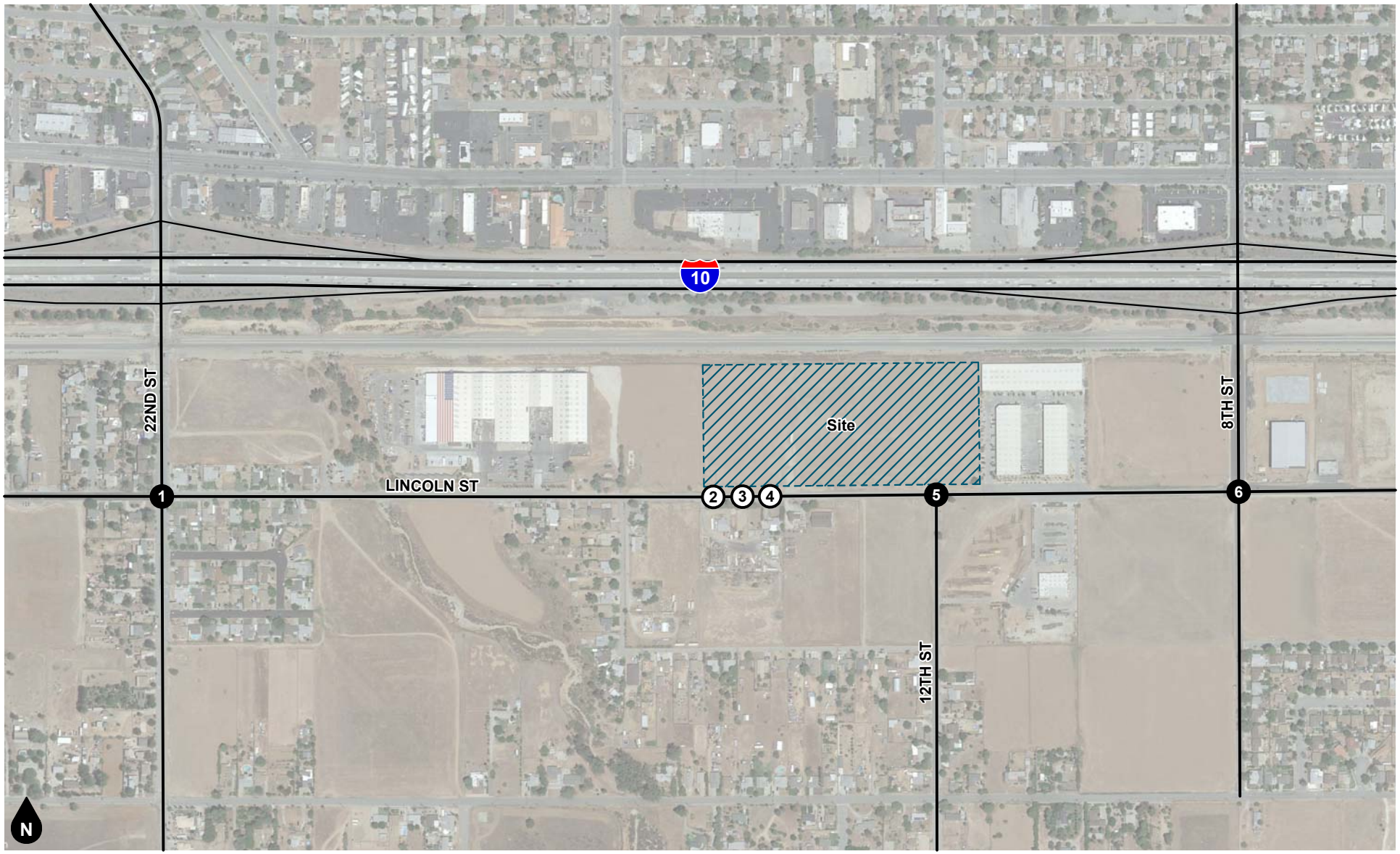
Notes:
1. (NS) = North-South roadway; (EW) = East-West roadway

Analysis Scenarios

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

- Existing Conditions (2023)
- Opening Year Conditions (2025)
- Opening Year Conditions With Project (2025)
- Cumulative Conditions (2025)
- Cumulative Conditions With Project (2025)
- Horizon Year Conditions (2045)
- Horizon Year Conditions With Project (2045)

This study includes a General Plan Buildout (Horizon Year (2045)) analysis as the project also involves a General Plan Amendment/Zone Change for a portion of the site from Industrial (I) and General Commercial (CC) to Industrial (I).



Legend

(#) Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

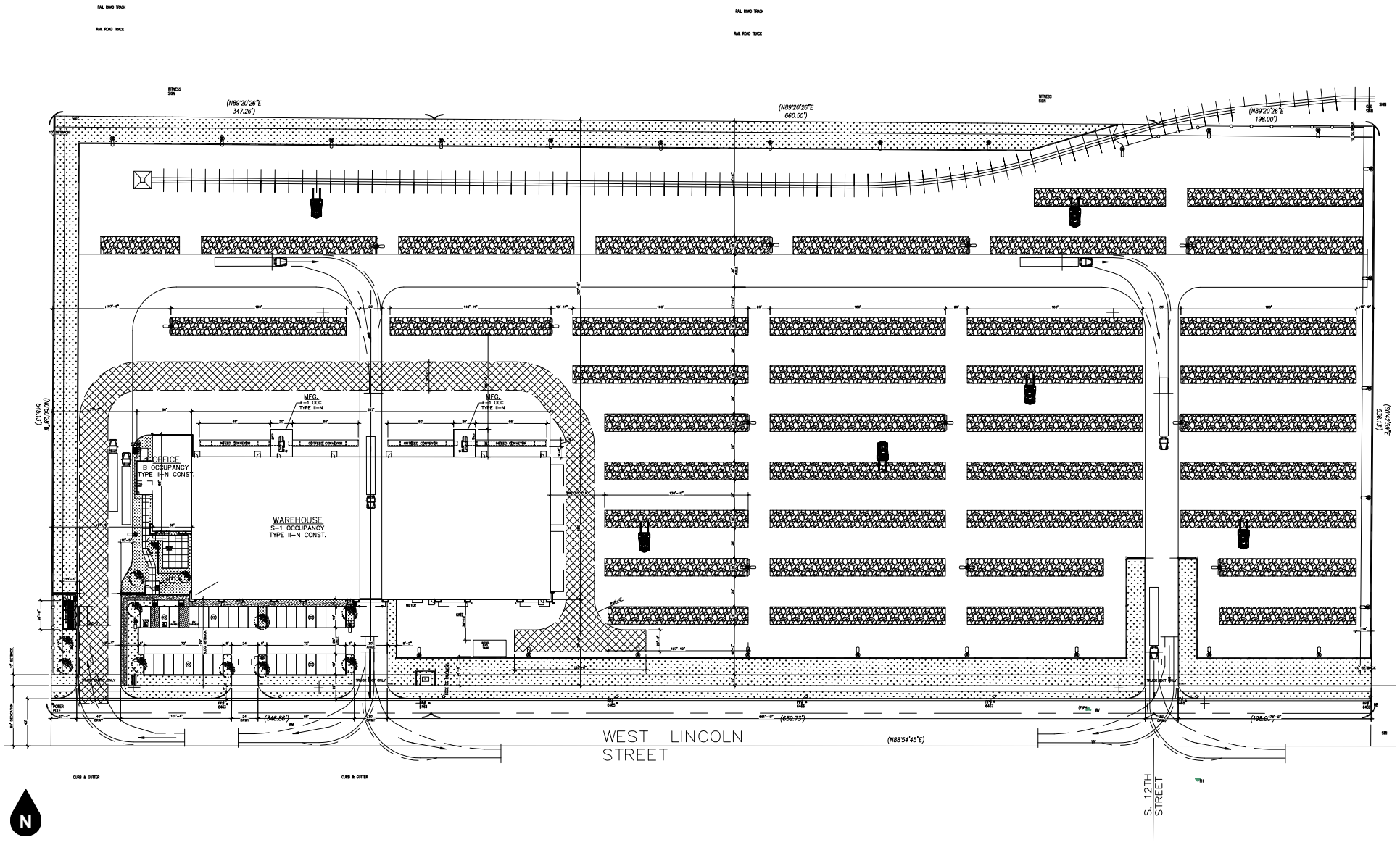


Figure 2
Site Plan

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.

The Intersection delay and Level of Service calculations were performed in accordance with input parameters as defined in the City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis*, October 2021.

Performance Standards

The City of Banning has established LOS D as the minimum acceptable Level of Service along all City maintained roads (including intersections).

Substantial Operational Deficiency Criteria

For study intersections within the City of Banning jurisdiction, a traffic impact occurs if:

a) The addition of project traffic causes the intersection LOS to degrade from acceptable LOS D or better to an unacceptable LOS E or F.

b) The addition of project traffic causes the peak hour delay to increase as follows:

- LOS A/B by 10 seconds;
- LOS C by 8 seconds;
- LOS D by 5 seconds;
- LOS E by 2 seconds;
- LOS F by 1 second

If either of the above conditions is satisfied, improvements should be identified that achieve the following:

- Improving traffic operations to LOS D for case a, above.
- Improving traffic operations to offset the increase in delay for case b, above.

If a project is forecast to cause an operational traffic impact, feasible improvements that will reduce the impact to an acceptable LOS are identified. Improvements can be in many forms, including the addition of lanes, traffic control modification, or 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. As previously noted, the project's VMT impact is documented separately in the *Brown Strauss Banning Industrial Project Vehicle Miles Traveled Screening Assessment* (Ganddini Group, Inc., April 2023).

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 10 (I-10) Freeway located adjacent to the project site to the north. Key roadways providing local circulation include 22nd Street, 12th Street, 8th Street, and Lincoln Street.

GENERAL PLAN CONTEXT

Figure 4 shows the City of Banning 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 Banning standard roadway cross-sections are illustrated on Figure 5.

Figure 6 shows the County of Riverside Pass Area 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 Pass Area Plan (September 28, 2021). The County of Riverside standard roadway cross-sections are illustrated on Figure 7.

TRUCK ROUTES

The City of Banning Commercial Vehicle Routes are illustrated on Figure 8. Existing truck routes in the project vicinity are shown on Figure 8. There are currently designated truck routes along Lincoln Street, 22nd Street north of Lincoln Street, and 8th Street north of Lincoln Street. Therefore, all trucks will be able to enter/exit the project site to/from the I-10 Freeway via designated commercial vehicle routes.

TRANSIT SERVICE

The Riverside Transit Agency (RTA) bus service and Banning Connect Transit System currently do not provide transit routes along Lincoln Street adjacent to the project site.

BICYCLE AND PEDESTRIAN FACILITIES

The County of Riverside Pass Area Trails and Bikeway Systems are illustrated on Figure 9. There are currently no existing bicycle lanes along Lincoln Street adjacent to the project site. The County of Riverside Pass Area Trails and Bikeway Systems does not show proposed bicycle lanes on Lincoln Street along the project site frontage.

Existing pedestrian facilities in the project vicinity are shown on Figure 10. Sidewalks are not currently provided on Lincoln Street along the project site frontage.

EXISTING ROADWAY VOLUMES

Figure 11 and Figure 12 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 August 2023 during typical weekday conditions when schools were in session. 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 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. Truck trips were converted to Passenger Car Equivalent (PCE) trips based on the following factors: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles in accordance with City of Banning guidelines. Traffic 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 (D or better) during the peak hours for Existing conditions.

Table 1
Existing Conditions Intersection Levels of Service

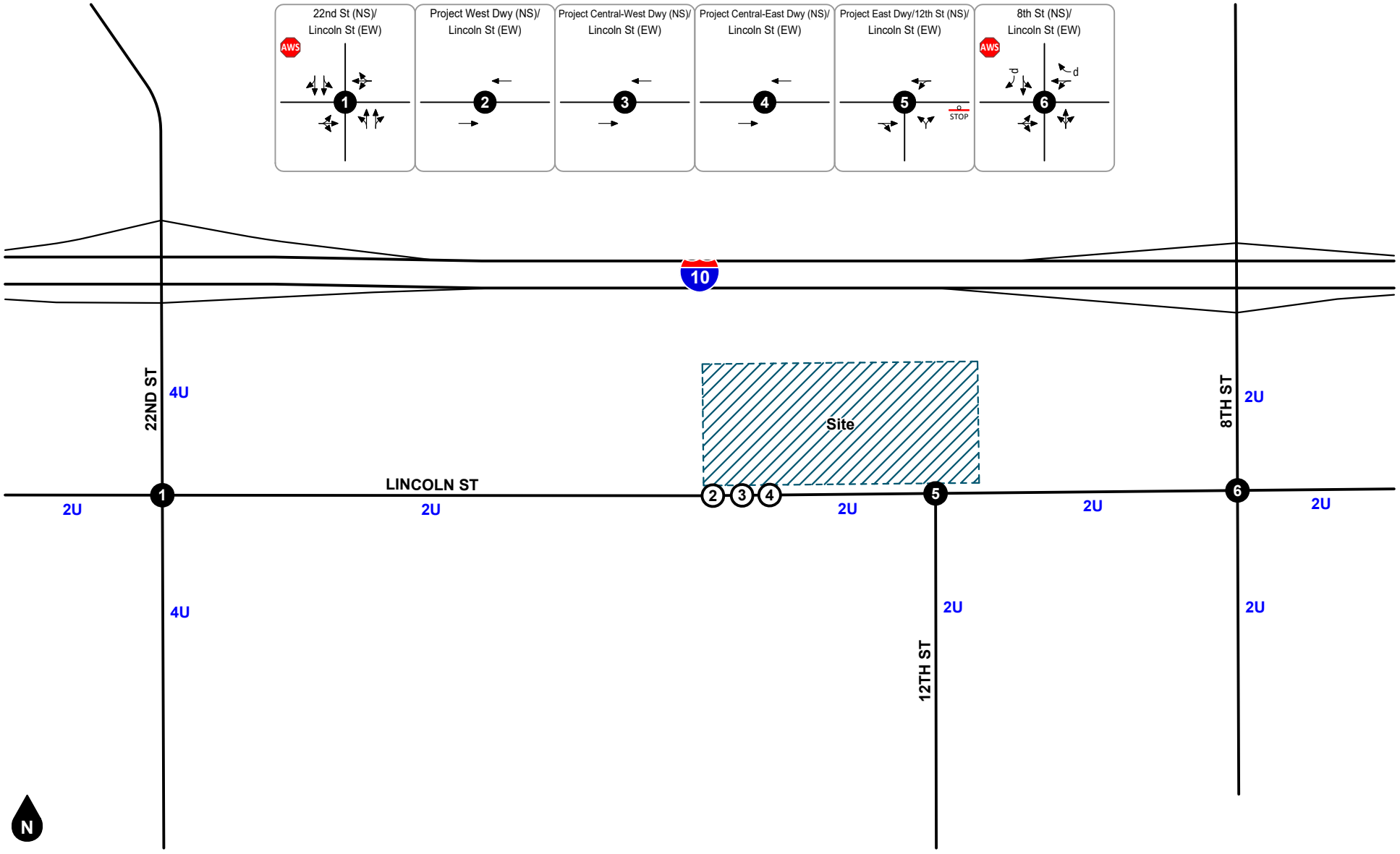
Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. 22nd St at Lincoln St	AWS	8.0	A	7.8	A
5. Project East Dwy/12th St at Lincoln St	CSS	9.0	A	9.2	A
6. 8th St at Lincoln St	AWS	33.6	D	12.4	B

Notes:

(1) AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown in seconds/vehicle. For intersections with all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service



Legend

- Traffic Signal
- AWS All Way Stop
- STOP Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane
- d De Facto Right Turn Lane

Figure 3
Existing Lane Geometry and Intersection Traffic Controls

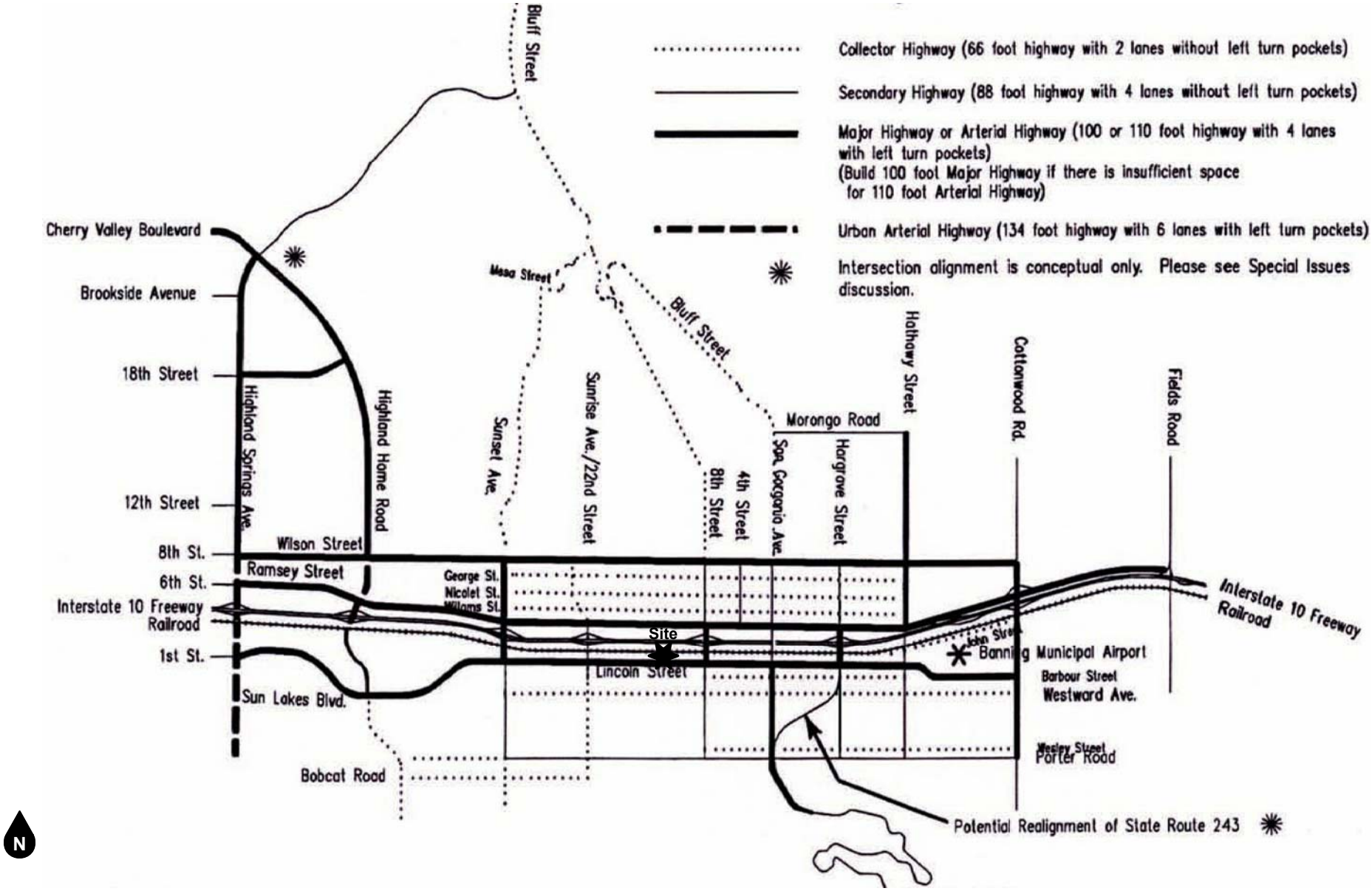


Figure 4
City of Banning General Plan Circulation Element

Source: City of Banning

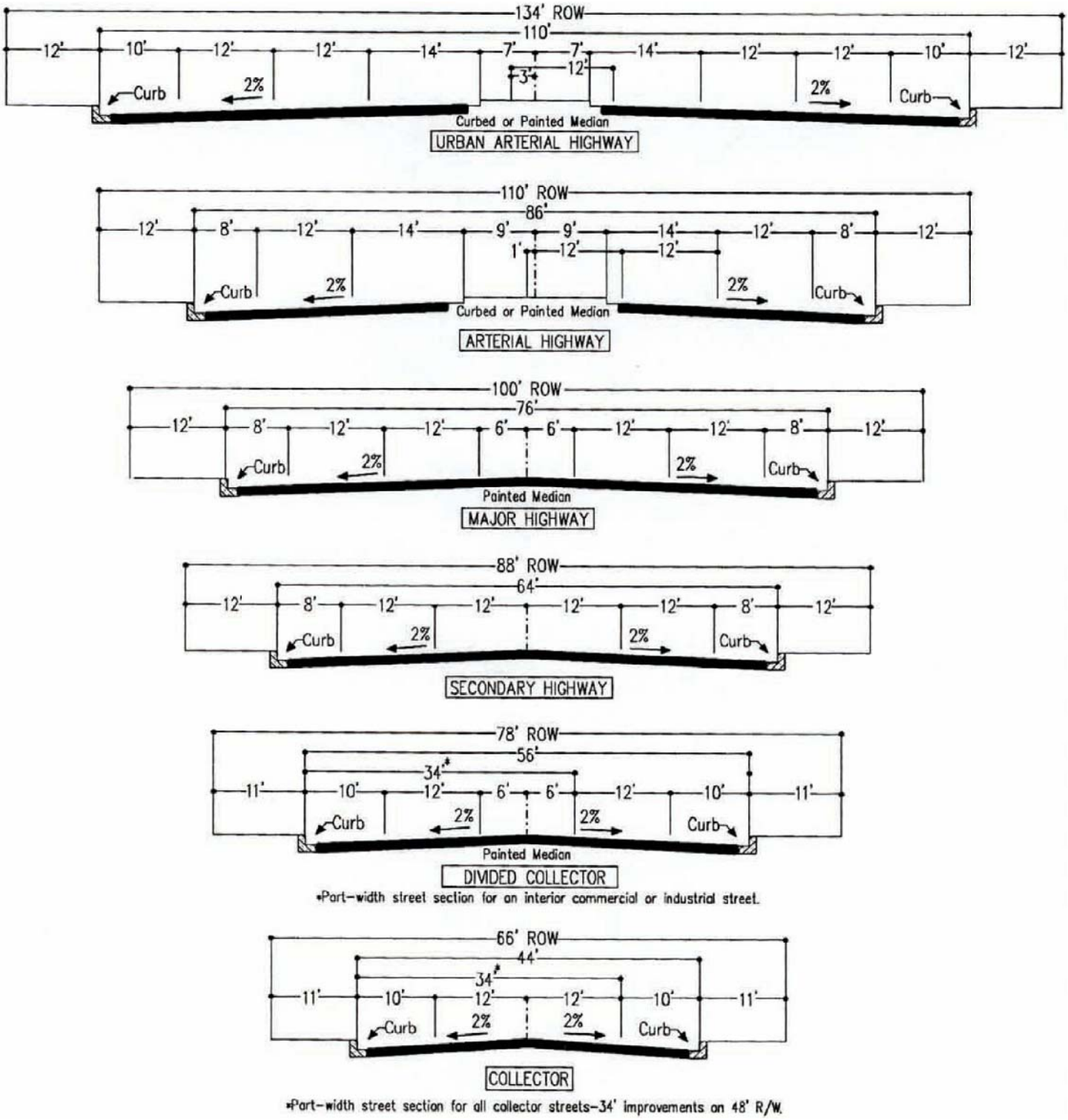


Figure 5
City of Banning General Plan Roadway Cross-Sections

Source: City of Banning

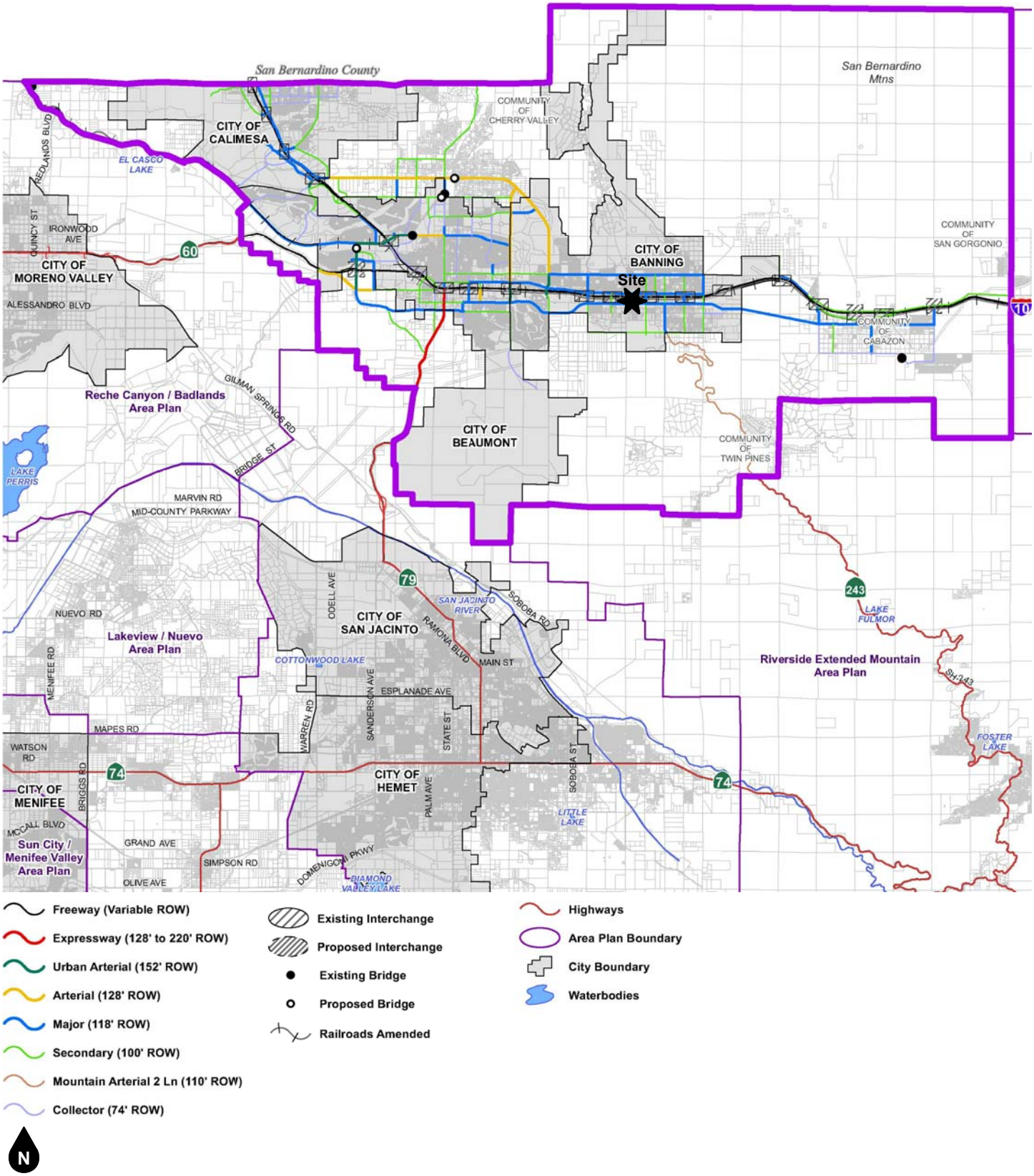
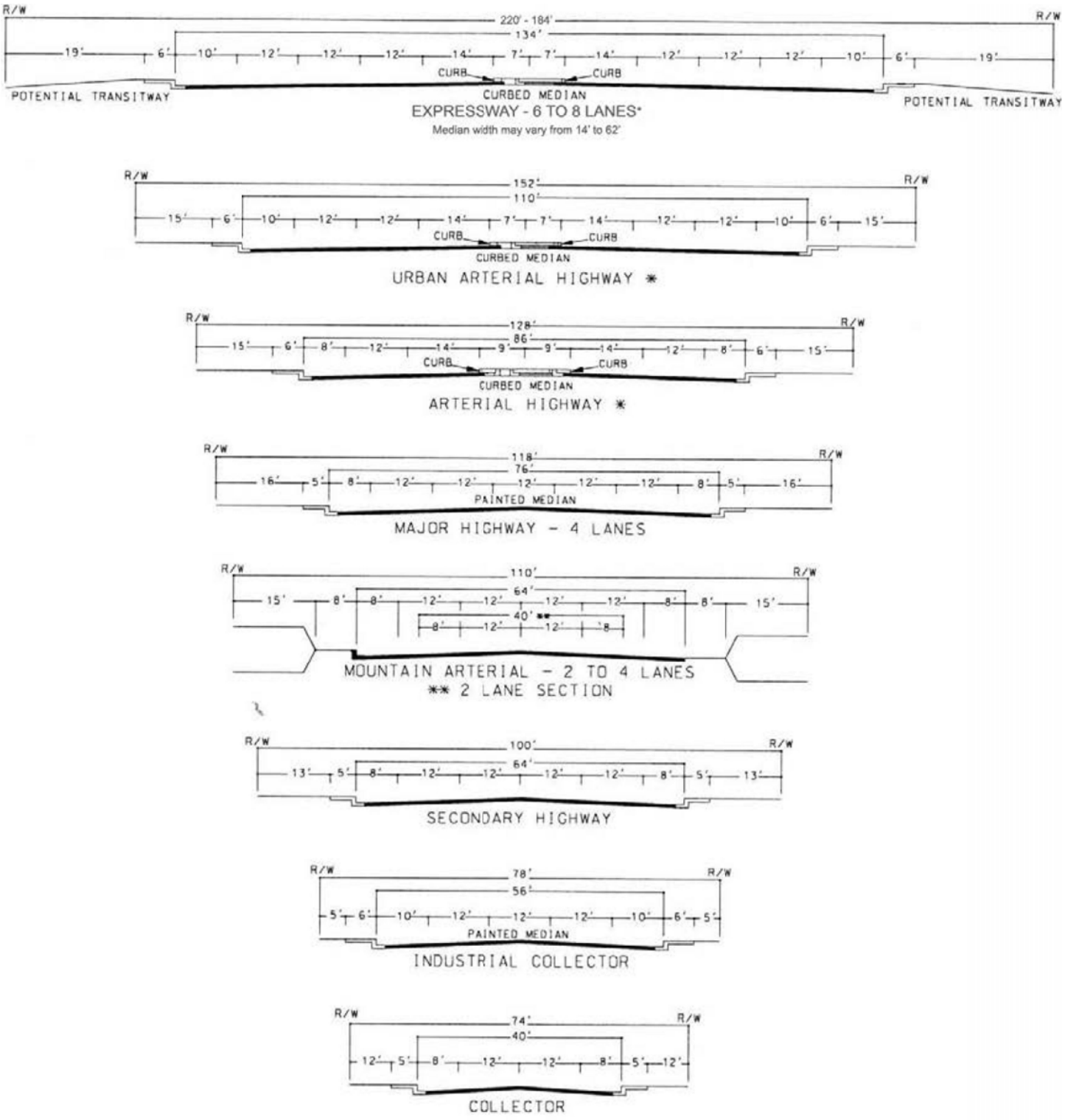


Figure 6
County of Riverside Pass Area Circulation Plan

Source: County of Riverside



*IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS. ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE. ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS SHALL CONFORM TO CALTRANS DESIGN STANDARDS.

Figure 7
County of Riverside General Plan Roadway Cross-Sections

Source: County of Riverside

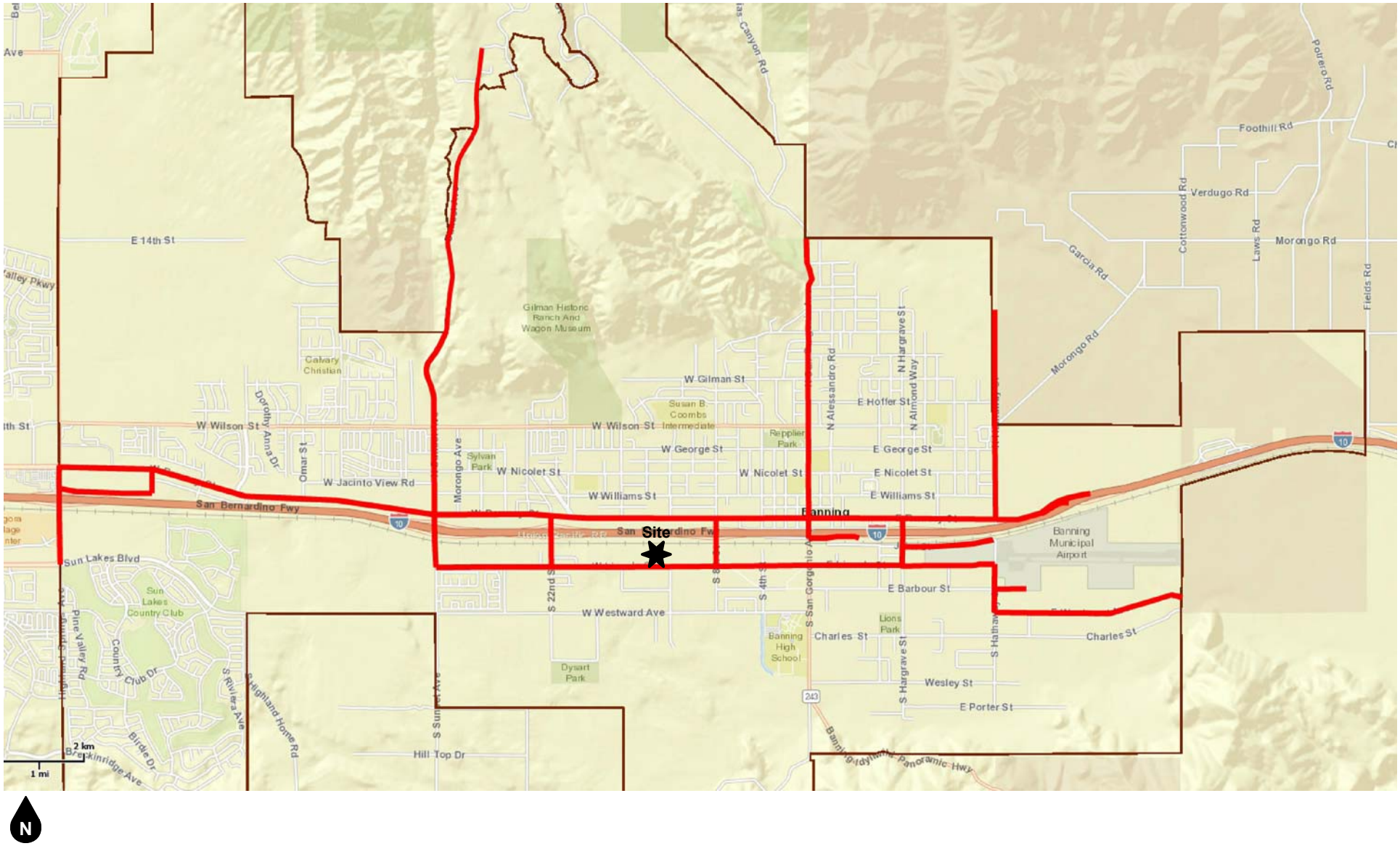


Figure 8
City of Banning Commercial Vehicle Routes

Source: City of Banning

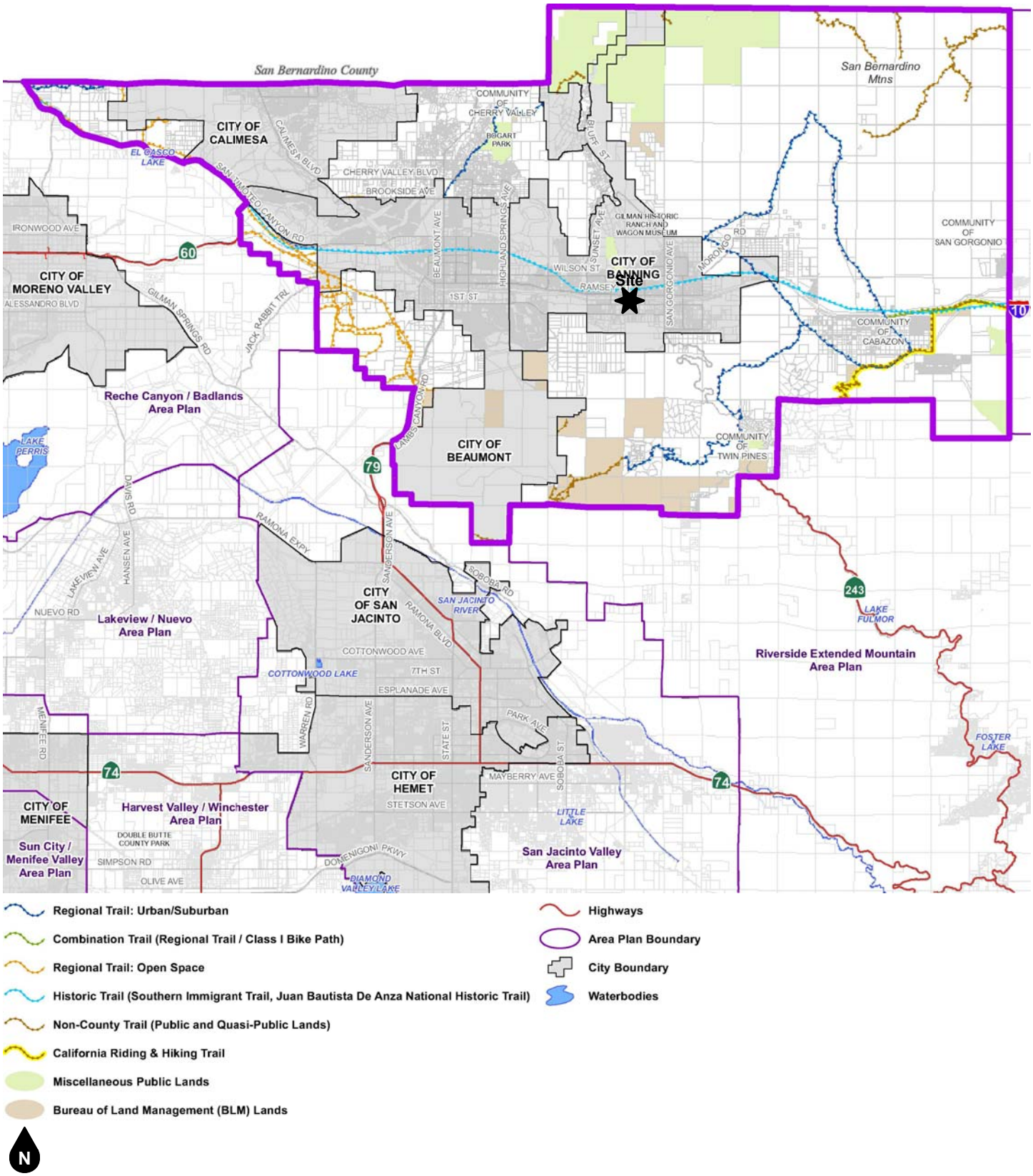
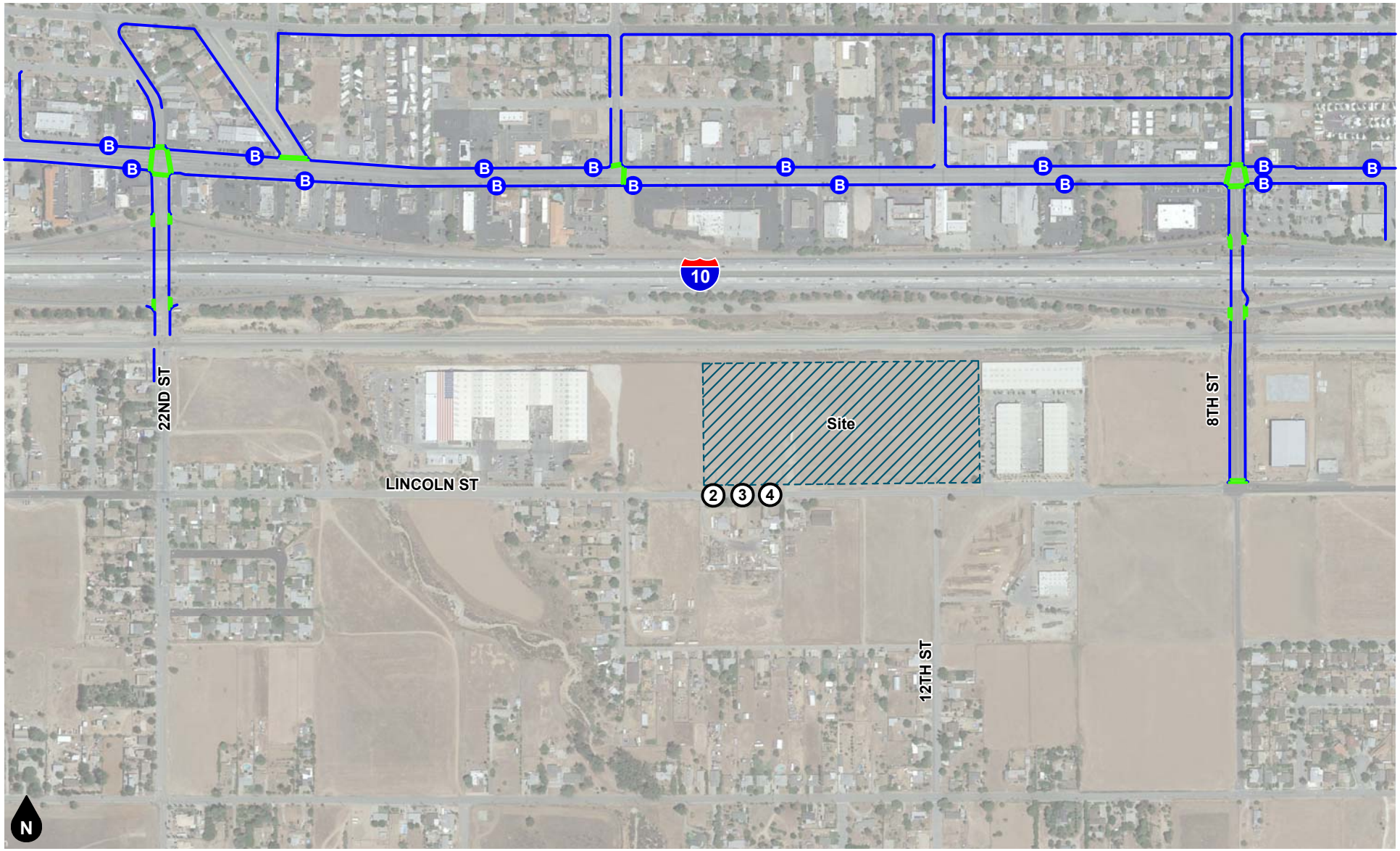


Figure 9
County of Riverside Pass Area Trails and Bikeway Systems

Source: County of Riverside



Legend
- Sidewalk
- Cross Walk
- B Bus Stop

Figure 10
Existing Pedestrian Facilities

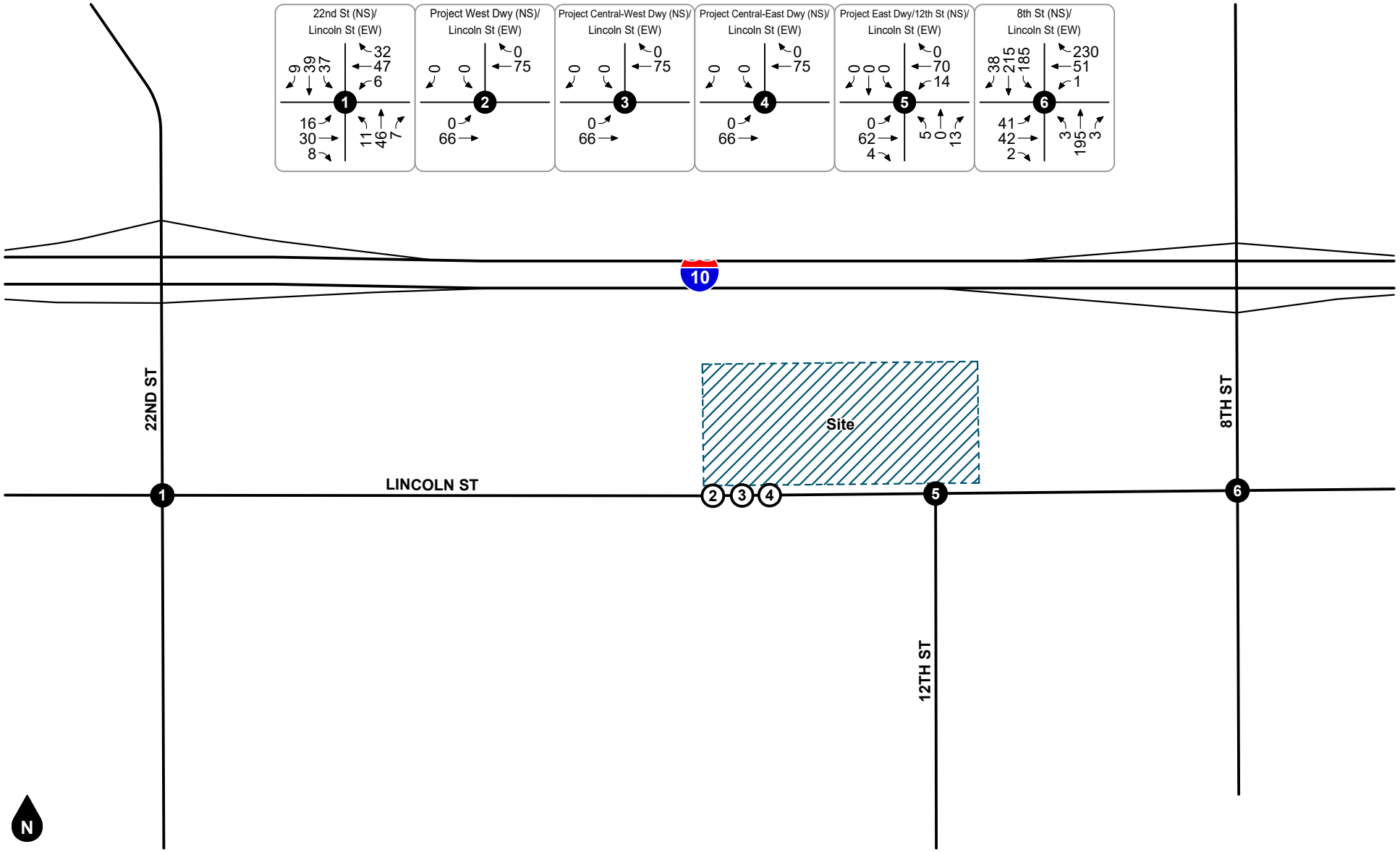


Figure 11
Existing AM Peak Hour Intersection Turning Movement Volumes

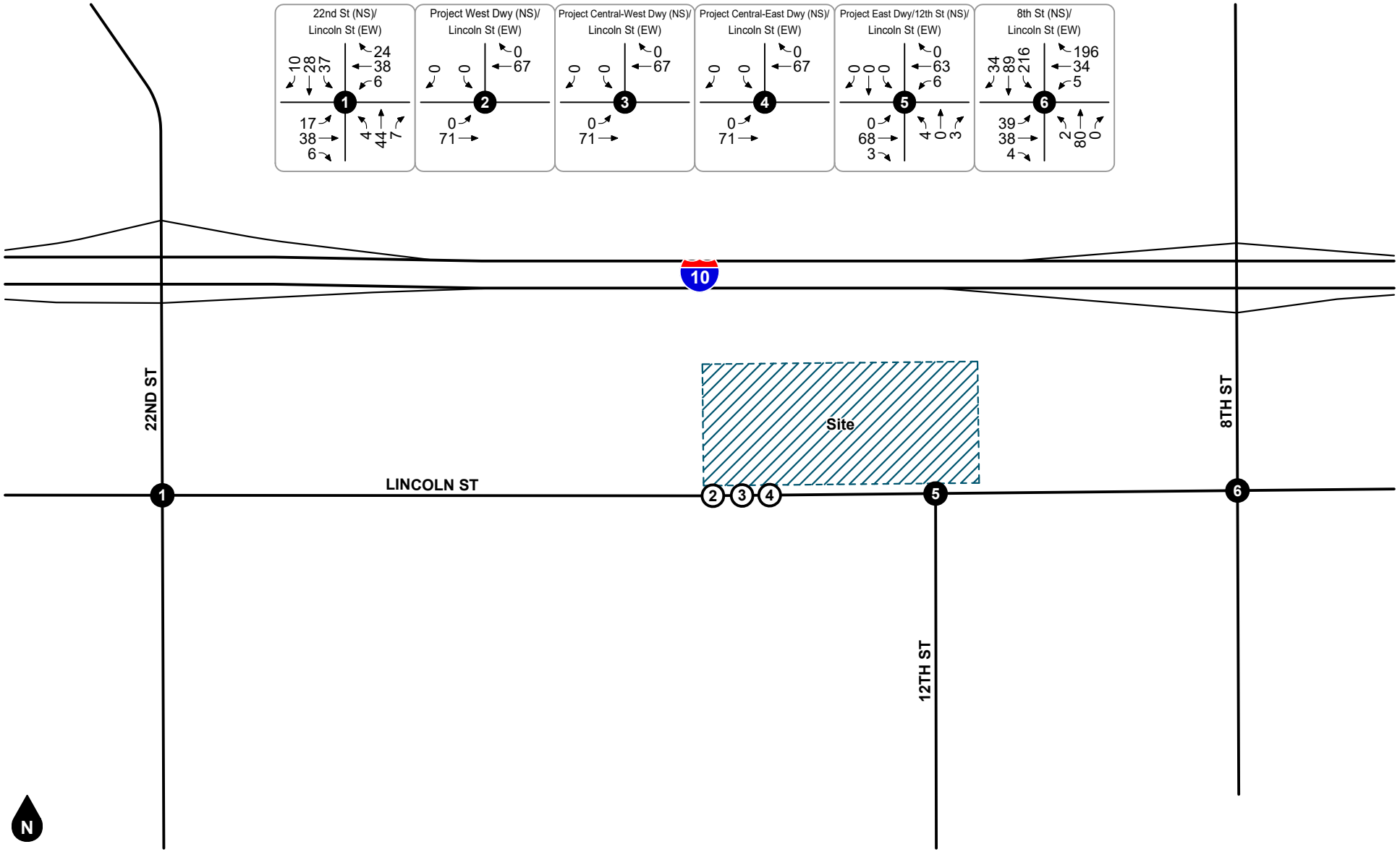


Figure 12
Existing PM Peak Hour Intersection Turning Movement Volumes

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

To determine project trip generation, 24-hour inbound/outbound trip counts were conducted at the driveway of the existing Brown Strauss Steel facility in the City of Fontana (14970 Jurupa Avenue) over a three-day period from Tuesday, March 7, 2023, through Thursday, March 9, 2023. Trip generation count worksheets are included in Appendix E.

Table 2 shows the observed trip generation for the existing Brown Strauss Steel facility, which is used in this analysis for the proposed project trip generation. As shown in Table 2, the proposed project is expected to generate approximately 191 daily vehicle trips based on the average trip counts observed at the existing Brown Strauss Steel facility, including 22 vehicle trips during the AM peak hour and 10 vehicle trips during the PM peak hour.

Truck Trips

In accordance with industry practice and City requirements for truck-oriented uses, the existing Brown Strauss Steel facility trip generation was also calculated in terms of Passenger Car Equivalent (PCE) trips. Truck trips were converted to PCE trips based on the following factors recommended by the City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis* (October 2021): 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

As also shown in Table 2, the proposed project is expected to generate approximately 343 daily PCE trips, including 43 PCE trips during the AM peak hour and 16 PCE trips during the PM peak hour.

Pro-Rated Trip Generation

Table 2 also shows the trips generated per acre for the existing 23.0-acre Brown Strauss Steel facility in the City of Fontana. For informational purposes, Table 3 shows the pro-rated project trip generation based on trips generated by acre. As shown in Table 3, the proposed relocation of existing operations from the 23.0-acre facility in Fontana to a smaller 14.92-acre facility in Banning could arguably be expected to generate fewer trips. To provide a conservative assessment, this analysis assumes that the proposed 14.92-acre facility will generate the same number of trips as the existing 23.0-acre facility in the City of Fontana.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 13 shows the forecast project trip distribution patterns for passenger cars. Figure 14 and Figure 15 show 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 Banning 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 16 and Figure 17, respectively.

SITE ACCESS

This analysis assumes the following improvements will be constructed by the project to provide project site access, as necessary based on the City of Banning General Plan classification for Lincoln Street as a Major Highway or Arterial Highway (100 to 110-foot right-of-way):

- Project West Driveway (NS) at Lincoln Street (EW) [Study Intersection #2]
  - Construct one inbound lane for truck ingress only
  - Eastbound: one shared through/left turn lane
  - Westbound: one shared through/right turn lane

- Project Central-West Driveway (NS) at Lincoln Street (EW) [Study Intersection #3]
  - Construct one inbound lane and one outbound lane with southbound stop-control for passenger car access only
  - Eastbound: one shared through/left turn lane
  - Westbound: one shared through/right turn lane

- Project Central-East Driveway (NS) at Lincoln Street (EW) [Study Intersection #4]
  - Construct one outbound lane with southbound stop-control for truck egress only
  - Eastbound: one shared through/left turn lane
  - Westbound: one shared through/right turn lane

- Project East Driveway/12th Street (NS) at Lincoln Street (EW) [Study Intersection #5]
  - Construct one outbound lane with southbound stop-control for truck egress only
  - Northbound: one shared left/through/right turn lane
  - Eastbound: one shared left/through/right turn lane
  - Westbound: one shared left/through/right turn lane

Table 2
Project Trip Generation

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Existing Brown Strauss Facility	Counts	23.00 AC							
Passenger Cars			3	4	7	0	4	4	99
Trucks (2-Axle)			2	3	5	2	2	4	19
Trucks (3-Axle)			2	0	2	0	0	0	4
Trucks (4+-Axle)			5	3	8	2	0	2	69
Total			12	10	22	4	6	10	191
Trips Generated in Passenger Car Equivalents[3]									
Existing Brown Strauss Facility	Counts	23.00 AC							
Passenger Cars			3	4	7	0	4	4	99
Trucks (2-Axle)			3	5	8	3	3	6	29
Trucks (3-Axle)			4	0	4	0	0	0	8
Trucks (4+-Axle)			15	9	24	6	0	6	207
Total			25	18	43	9	7	16	343

Trips Generation Rates Per Acre									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Existing Brown Strauss Facility	Counts	1.0 AC							
Passenger Cars			0.13	0.17	0.30	0.00	0.17	0.17	4.30
Trucks (2-Axle)			0.09	0.13	0.22	0.09	0.09	0.18	0.83
Trucks (3-Axle)			0.09	0.00	0.09	0.00	0.00	0.00	0.17
Trucks (4+-Axle)			0.22	0.13	0.35	0.09	0.00	0.09	3.00
Total			0.52	0.43	0.95	0.17	0.26	0.43	8.30

Notes:

1. Traffic counts at project driveway (see Tables 2 and 3).
2. AC = Acres
3. Source: City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis* (October 2021).
4. The ITE Trip Generation Manual does not include pass-by rates for Land Use Code 937; however, the average pass-by rates for ITE Land Use Code 938 (Coffee Shop With Drive Through Window and No Indoor Seating) are 90% during the AM peak hour and 98% during the PM peak hour. Although the proposed coffee shop (with drive through and indoor seating) is expected to have similar pass-by characteristics, this analysis uses a lower pass-by rate of 80% to provide a conservative assessment.

   2-Axle = 1.5; 3-Axle = 2.0; 4+-Axle = 3.0

Table 3
Pro-Rated Project Trip Generation (for Informational Purposes)

Trips Generation Rates Per Acre									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Existing Brown Strauss Facility	Counts	1.0 AC							
Passenger Cars			0.13	0.17	0.30	0.00	0.17	0.17	4.30
Trucks (2-Axle)			0.09	0.13	0.22	0.09	0.09	0.18	0.83
Trucks (3-Axle)			0.09	0.00	0.09	0.00	0.00	0.00	0.17
Trucks (4+-Axle)			0.22	0.13	0.35	0.09	0.00	0.09	3.00
Total			0.52	0.43	0.95	0.17	0.26	0.43	8.30

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Proposed Brown Strauss Facility	Counts	14.92 AC							
Passenger Cars			2	3	5	0	3	3	64
Trucks (2-Axle)			1	2	3	1	1	2	12
Trucks (3-Axle)			1	0	1	0	0	0	3
Trucks (4+-Axle)			3	2	5	1	0	1	45
Total			7	7	14	2	4	6	124
Trips Generated in Passenger Car Equivalents[3]									
Proposed Brown Strauss Facility	Counts	14.92 AC							
Passenger Cars			2	3	5	0	3	3	64
Trucks (2-Axle)			2	3	5	2	2	4	18
Trucks (3-Axle)			2	0	2	0	0	0	6
Trucks (4+-Axle)			9	6	15	3	0	3	135
Total			15	12	27	5	5	10	223

Notes:

1. Traffic counts at project driveway (see Tables 2, 3 and 4).
2. AC = Acres
3. Source: City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis* (October 2021).
4. The ITE Trip Generation Manual does not include pass-by rates for Land Use Code 937; however, the average pass-by rates for ITE Land Use Code 938 (Coffee Shop With Drive Through Window and No Indoor Seating) are 90% during the AM peak hour and 98% during the PM peak hour. Although the proposed coffee shop (with drive through and indoor seating) is expected to have similar pass-by characteristics, this analysis uses a lower pass-by rate of 80% to provide a conservative assessment.

   2-Axle = 1.5; 3-Axle = 2.0; 4+-Axle = 3.0

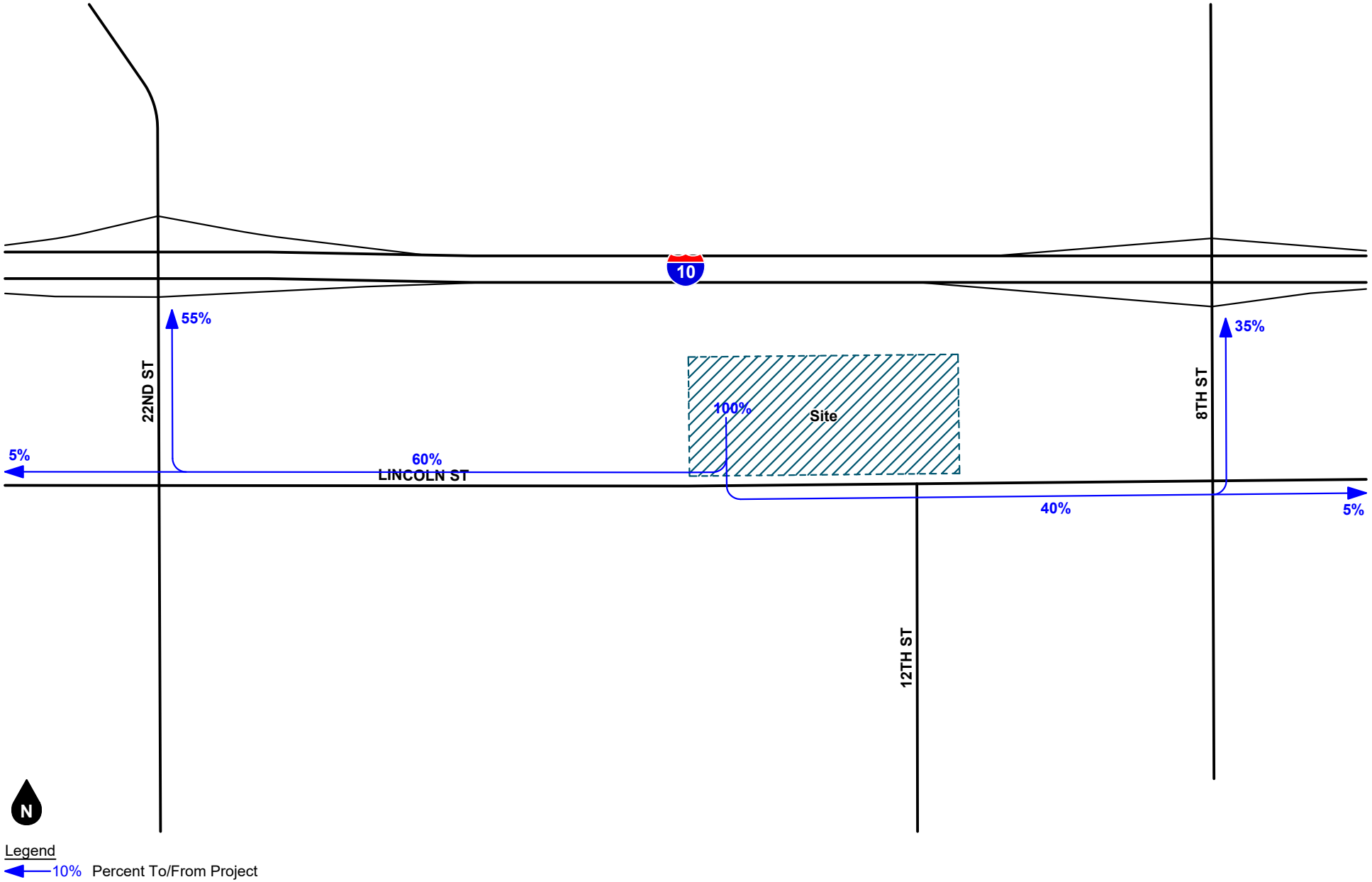


Figure 13
Project Trip Distribution - Passenger Cars

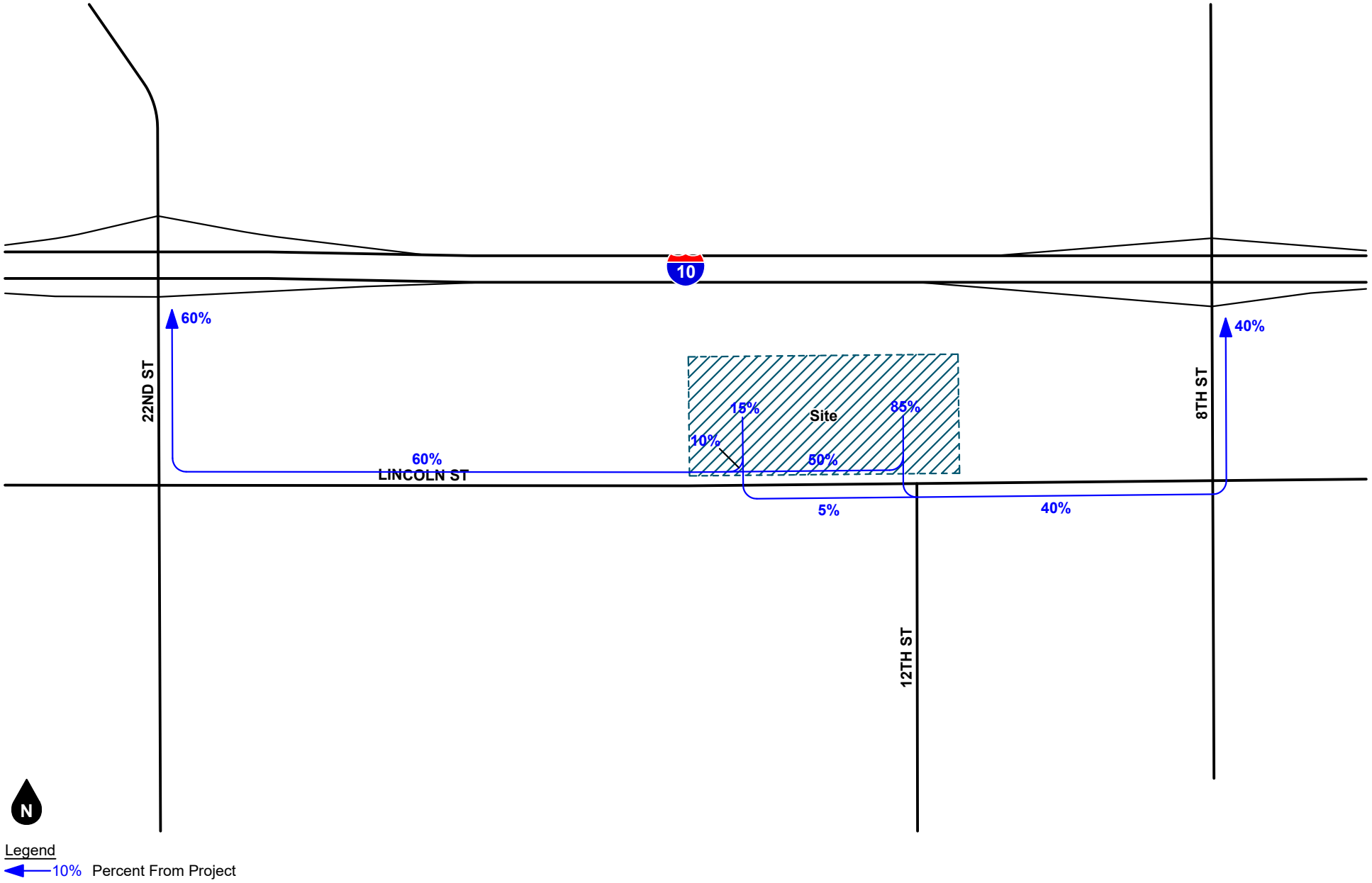


Figure 14
Project Outbound Trip Distribution - Trucks

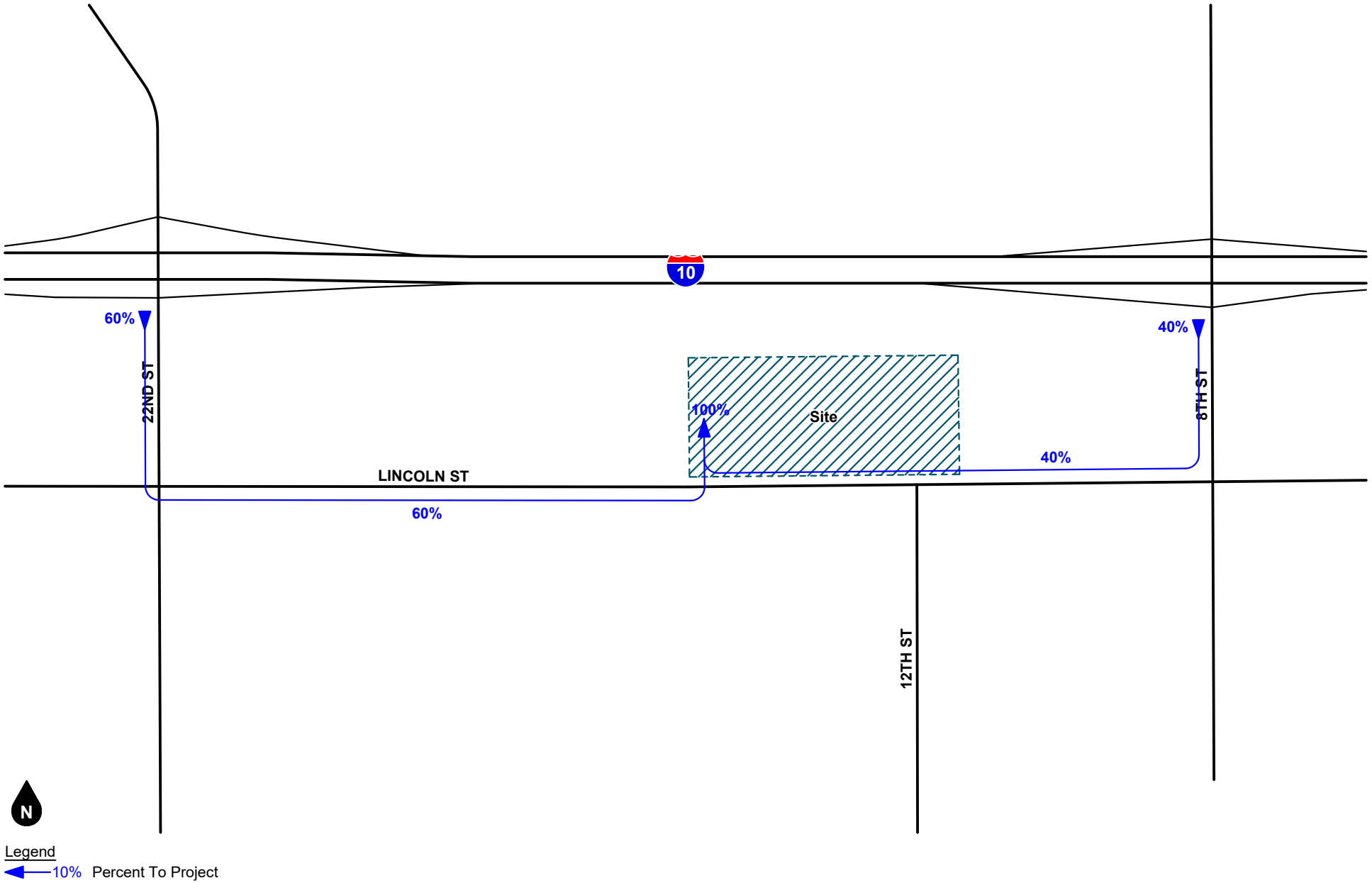
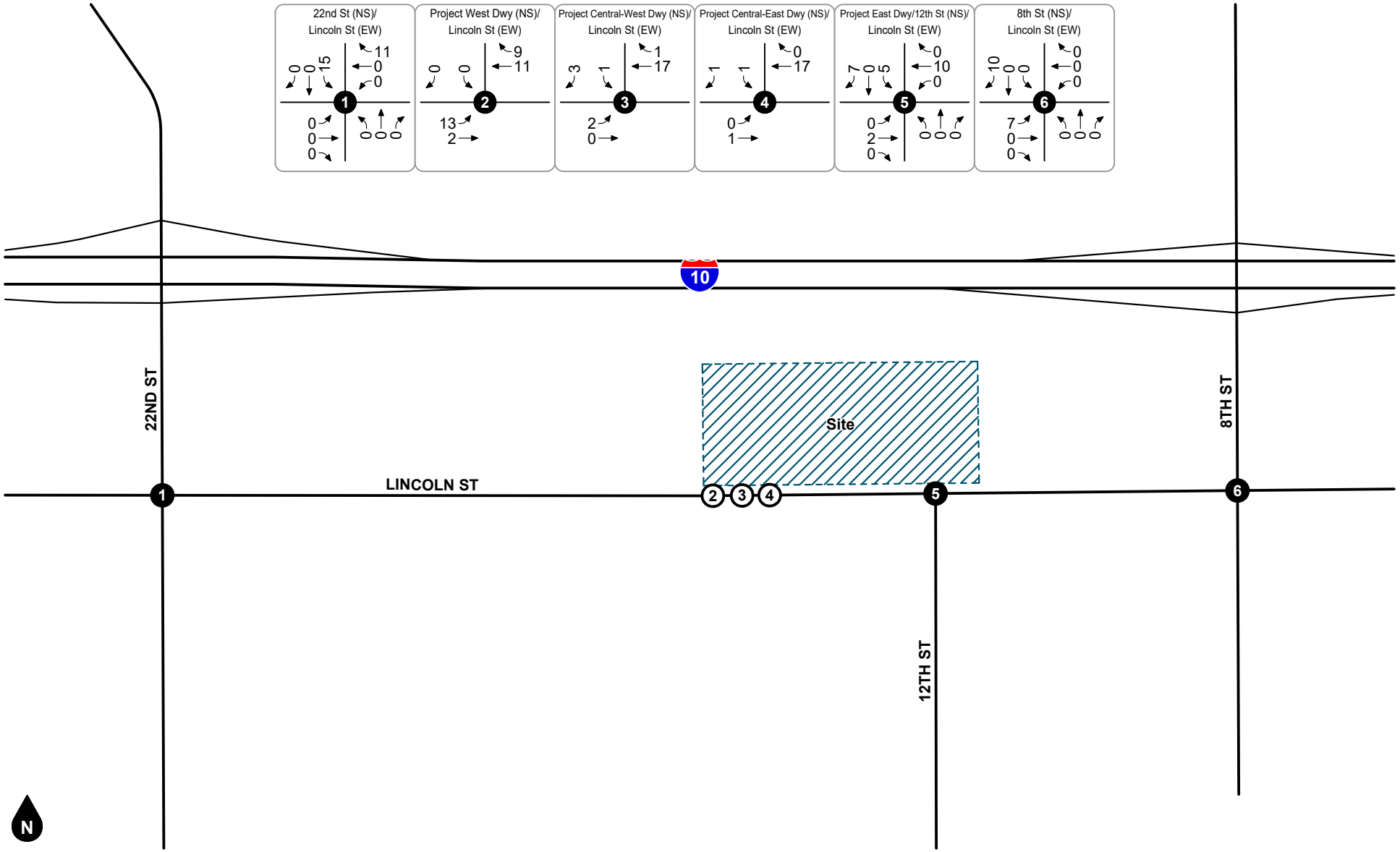


Figure 15
Project Inbound Trip Distribution - Trucks



Legend

Study Intersection

(#) Project Driveway

Figure 16
Project AM Peak Hour Intersection Turning Movement Volumes

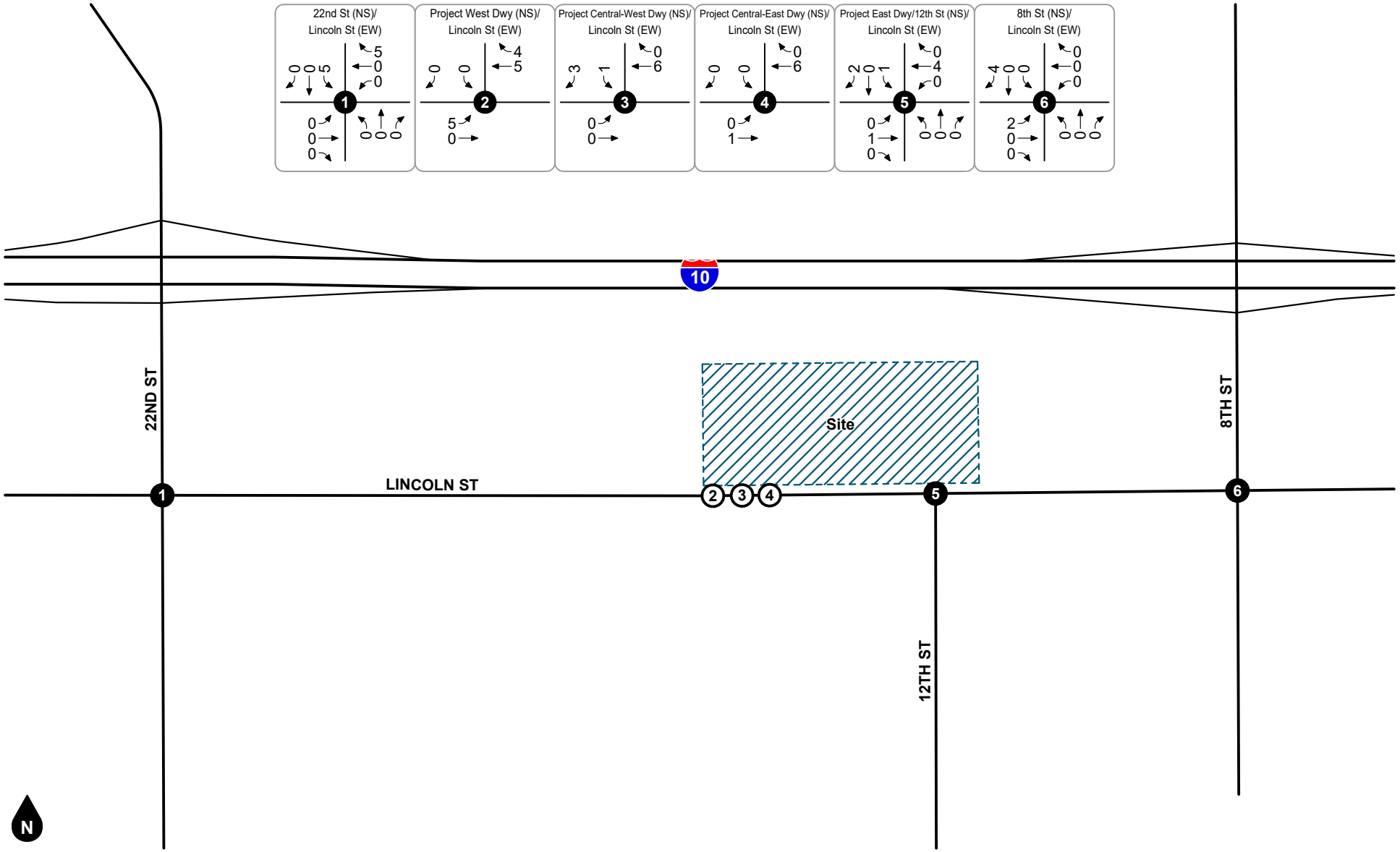


Figure 17
Project PM Peak Hour Intersection Turning Movement Volumes

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 2023 roadway volumes were increased by a growth rate of two percent (2%) per year over two years for Opening Year (2025) conditions. This equates to a total growth factor of approximately 1.0404. 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 Banning were added to the study area. Table 4 shows the other development trip generation and Figure 18 exhibits the other development location map.

Figure 19 and Figure 20 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

ANALYSIS SCENARIO VOLUME FORECASTS

Opening Year Conditions (2025)

Opening Year Conditions (2025) volume forecasts were developed by adding ambient growth to Existing volumes. Opening Year Conditions (2025) AM and PM peak hour intersection turning movement volumes are shown on Figure 21 and Figure 22.

Opening Year Conditions With Project (2025)

Opening Year Conditions With Project (2025) volume forecasts were developed by adding project traffic to Opening Year Conditions (2025) forecast volumes. Opening Year Conditions With Project (2025) AM and PM peak hour intersection turning movement volumes are shown Figure 23 and Figure 24.

Cumulative Conditions (2025)

Cumulative Conditions (2025) volume forecasts were developed by adding traffic generated from approved and pending development projects to Opening Year Conditions (2025) forecast volumes. Cumulative Conditions (2025) AM and PM peak hour intersection turning movement volumes are shown on Figure 25 and Figure 26.

Cumulative Conditions With Project (2025)

Cumulative Conditions With Project (2025) volume forecasts were developed by adding project traffic to Cumulative Conditions (2025) forecast volumes. Cumulative Conditions With Project (2025) AM and PM peak hour intersection turning movement volumes are shown on Figure 27 and Figure 28.

Table 4
Other Development Trip Generation

Map ID	Project Name	Land Use	Quantity	Units[1]	Trips Generated						
					AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	Daily
1	Highway 243 Industrial Center[2]	Light Industrial	54.130	TSF							
		- Cars			26	4	30	3	24	27	211
		- Trucks			17	2	19	0	17	17	127
2	TPM 35617[2]	Church	4.990	TSF	29	26	55	26	29	55	237
3	Lawrence Equipment[3]	Industrial	146.890	TSF							
		- Cars			39	12	51	17	39	56	370
		- Trucks			10	4	14	4	10	14	94
4	Downing Const. Corp[2]	Offiice	9.320	TSF	9	2	11	2	9	11	91
5	DR 18-7006[2]	Residential	13	DU	2	7	9	8	5	13	123
Total					**132**	**57**	**189**	**60**	**133**	**193**	**1,253**

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

(2) Source: *Traffic Impact Analysis for Highway 243 Industrial Center* (LSA, October 2019)

(3) Source: *Traffic Impact Report for Lawrence Equipment Warehouse* (Linscott, Law & Greenspan, Engineers, January 14, 2019)

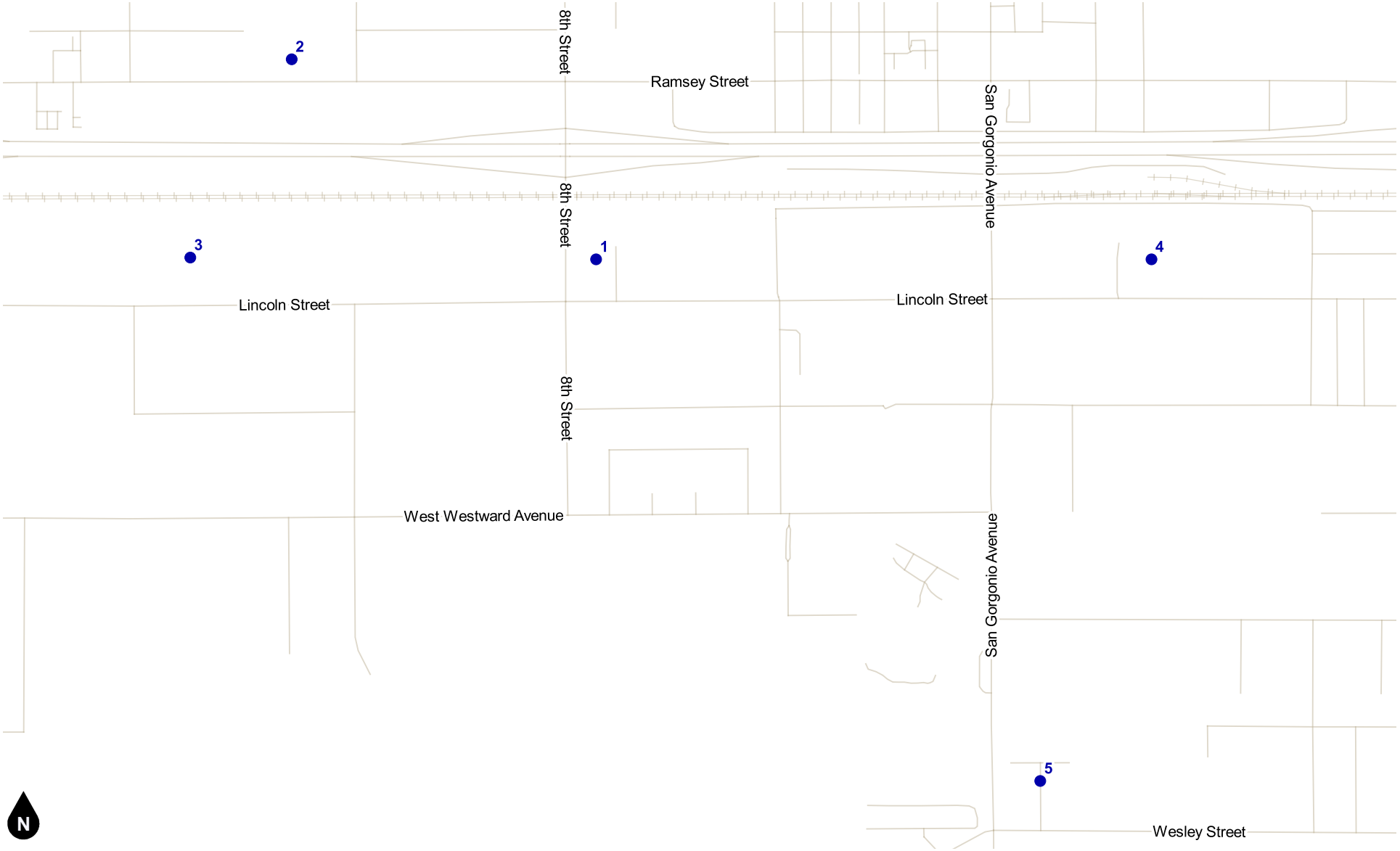
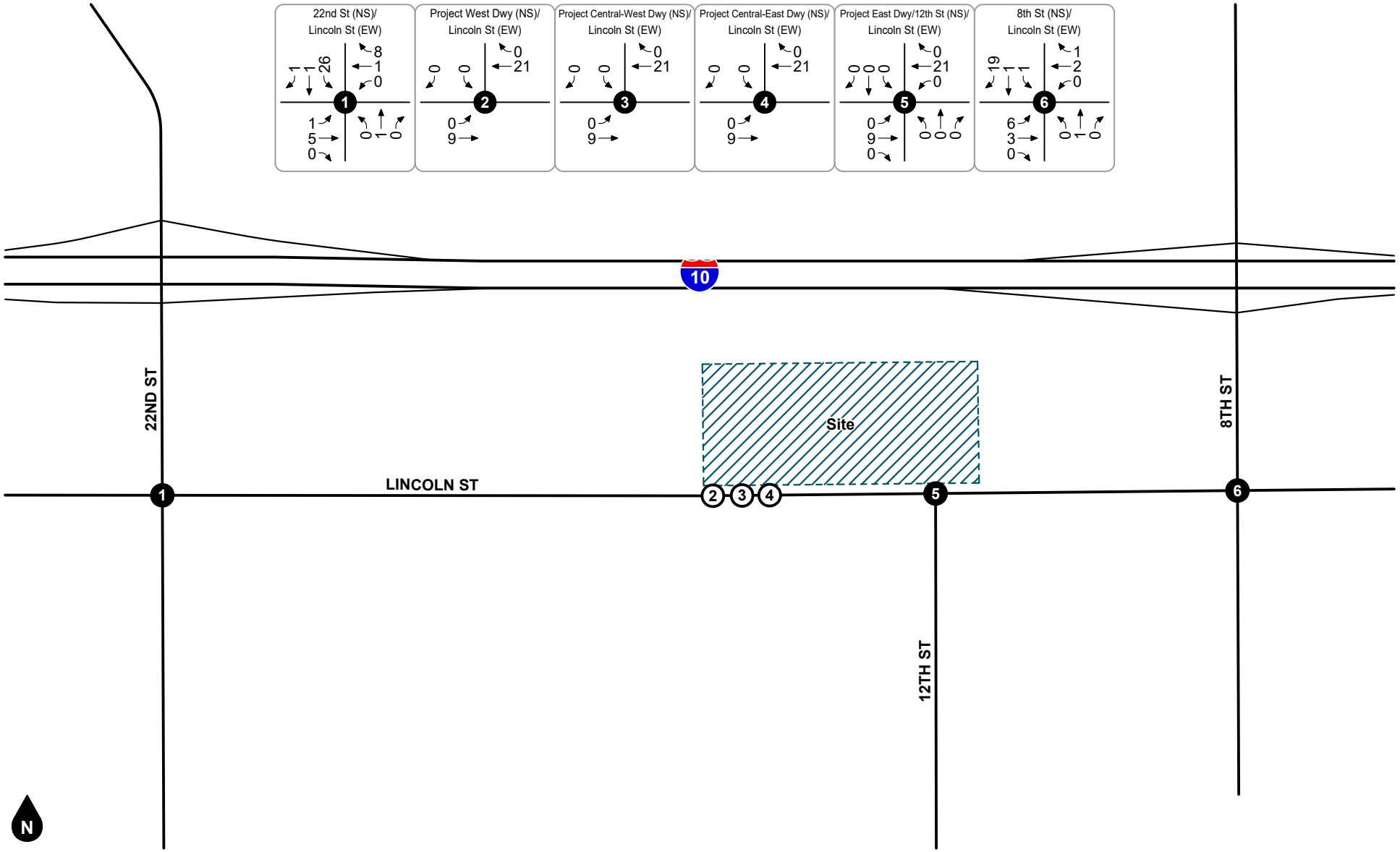


Figure 18
Other Development Location Map

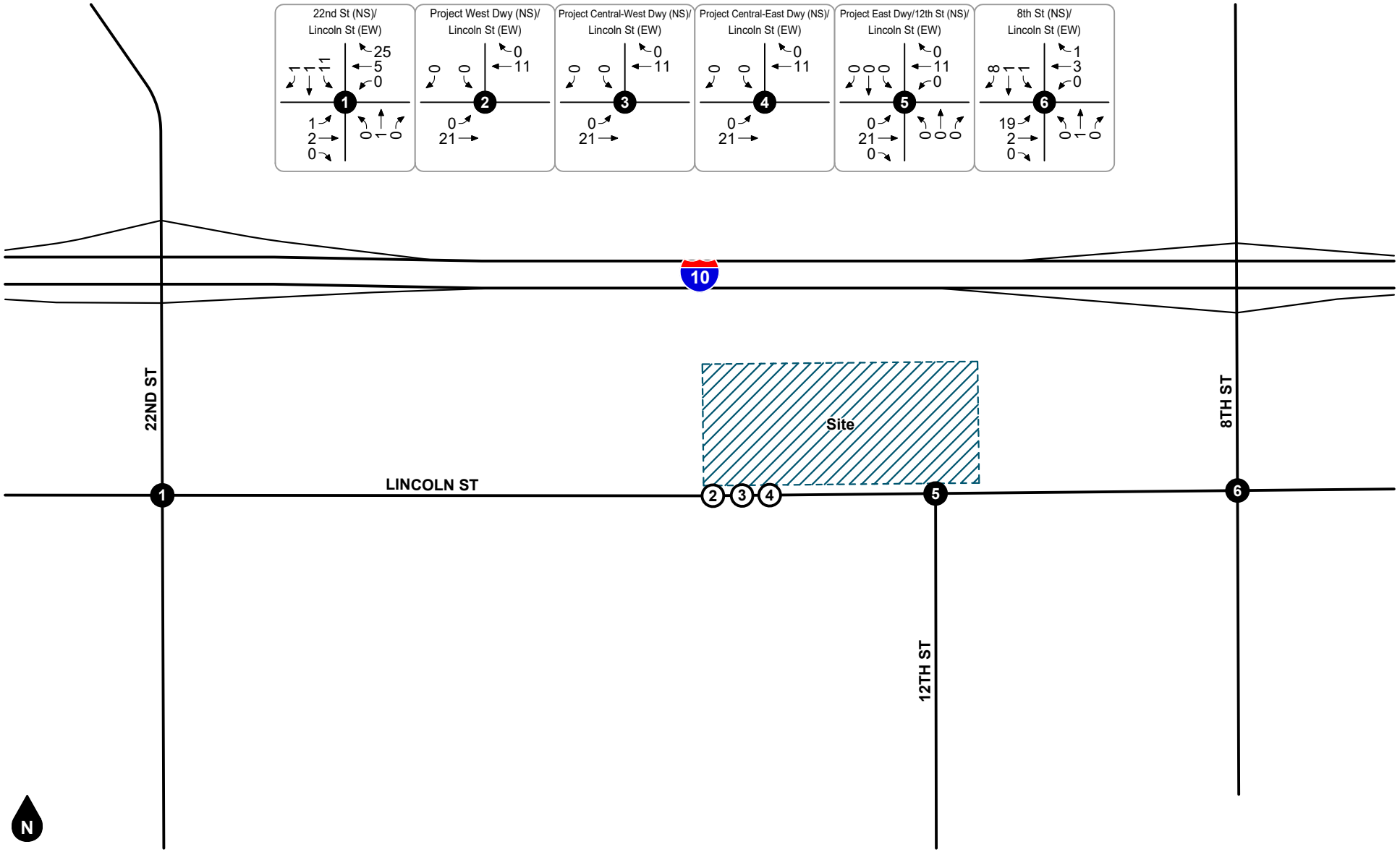


Legend

(#) Study Intersection

(#) Project Driveway

Figure 19
Other Development
AM Peak Hour Intersection Turning Movement Volumes

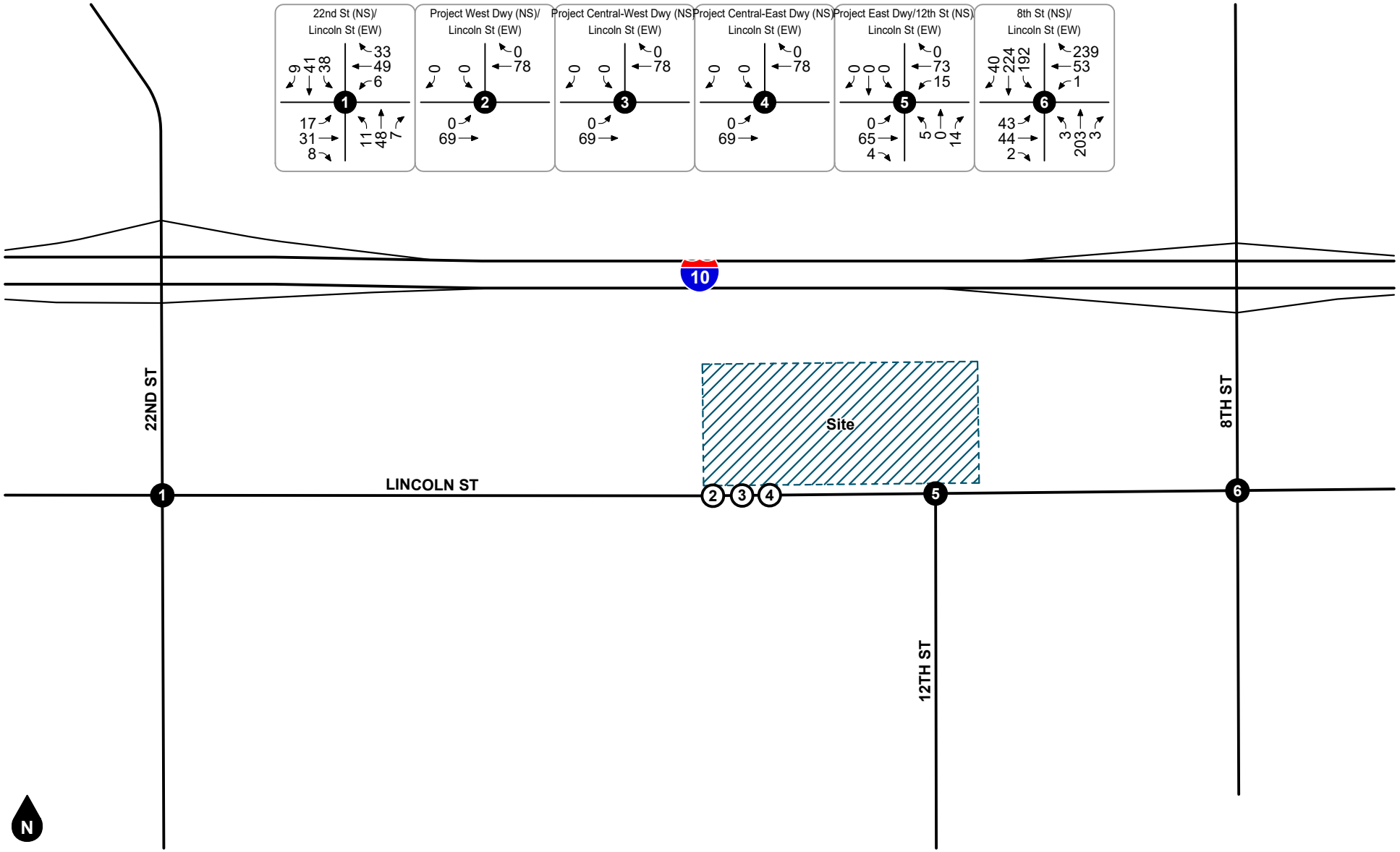


Legend

(#) Study Intersection

(#) Project Driveway

Figure 20
Other Development
PM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 21
Opening Year Conditions (2025)
AM Peak Hour Intersection Turning Movement Volumes

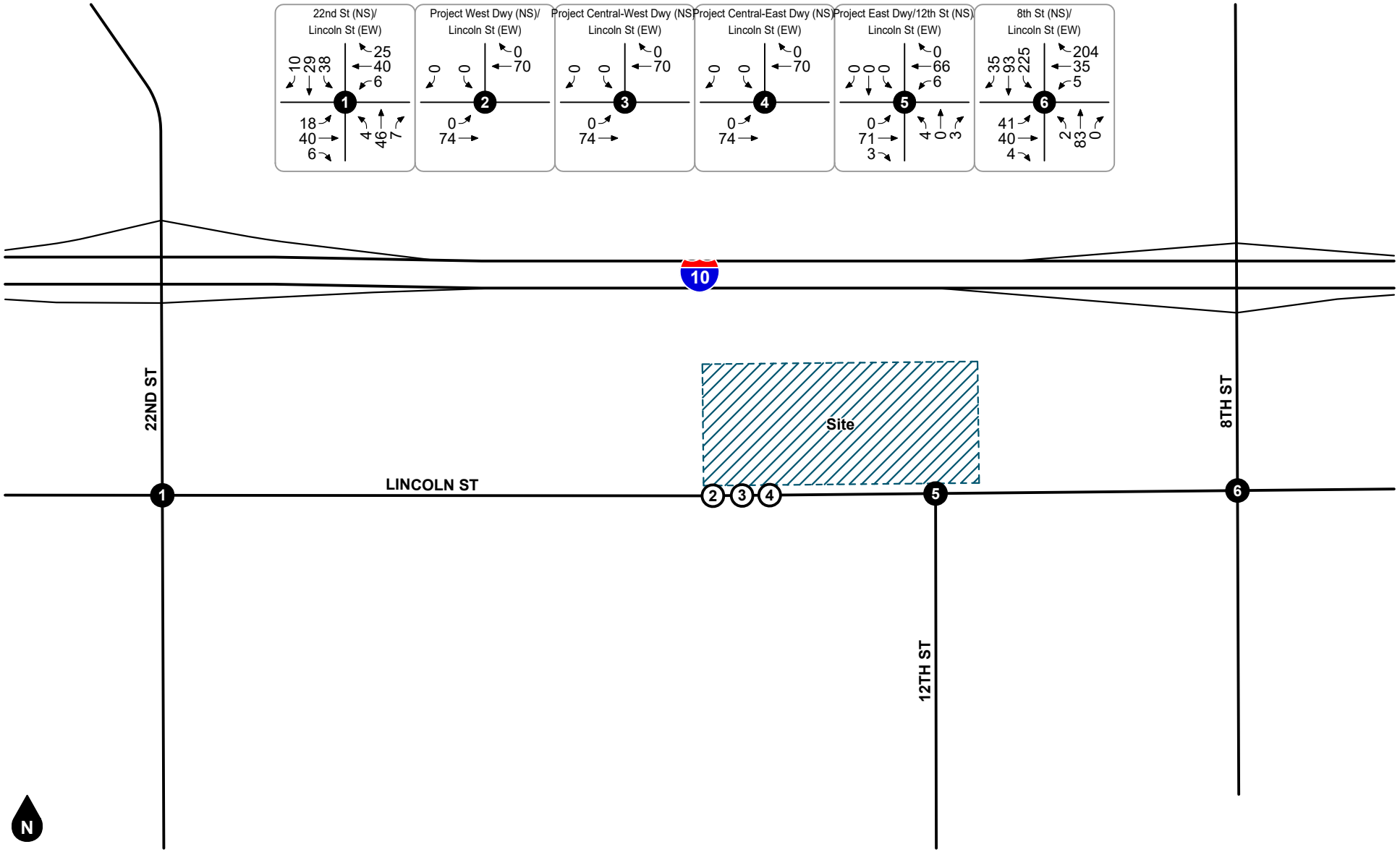


Figure 22
Opening Year Conditions (2025)
PM Peak Hour Intersection Turning Movement Volumes

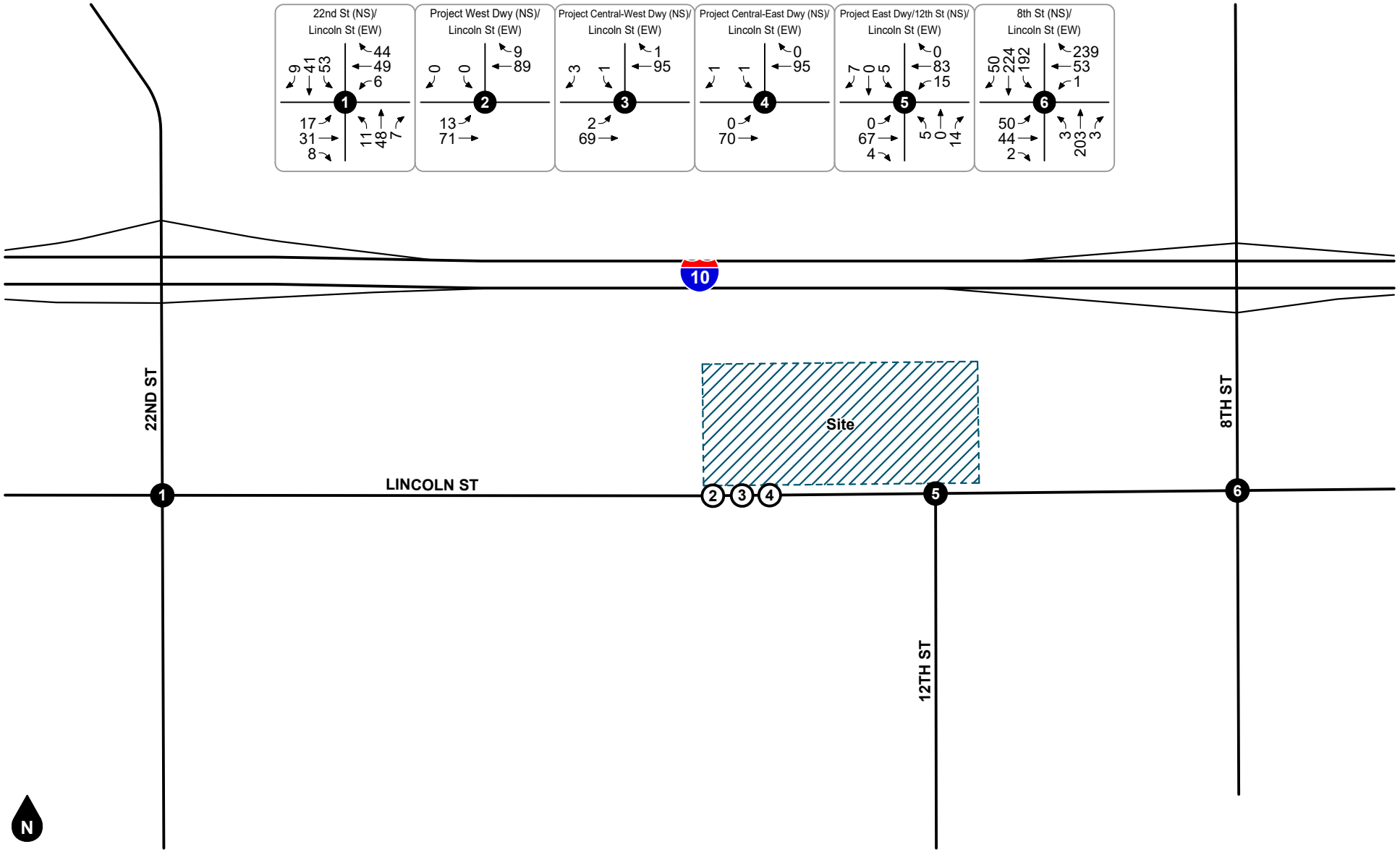
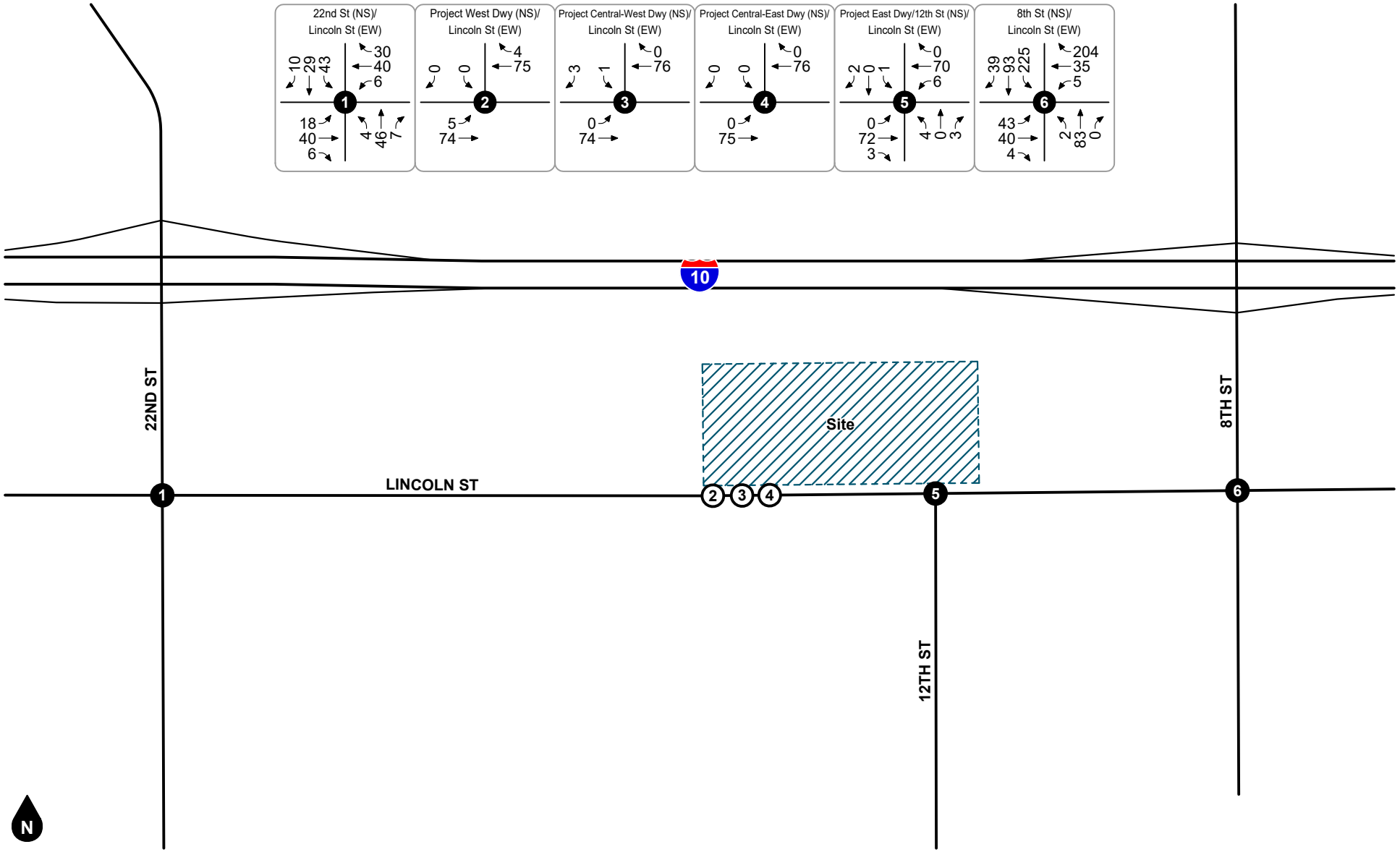


Figure 23
Opening Year Conditions With Project (2025)
AM Peak Hour Intersection Turning Movement Volumes



Legend

Study Intersection

(#) Project Driveway

Figure 24
Opening Year Conditions With Project (2025)
PM Peak Hour Intersection Turning Movement Volumes

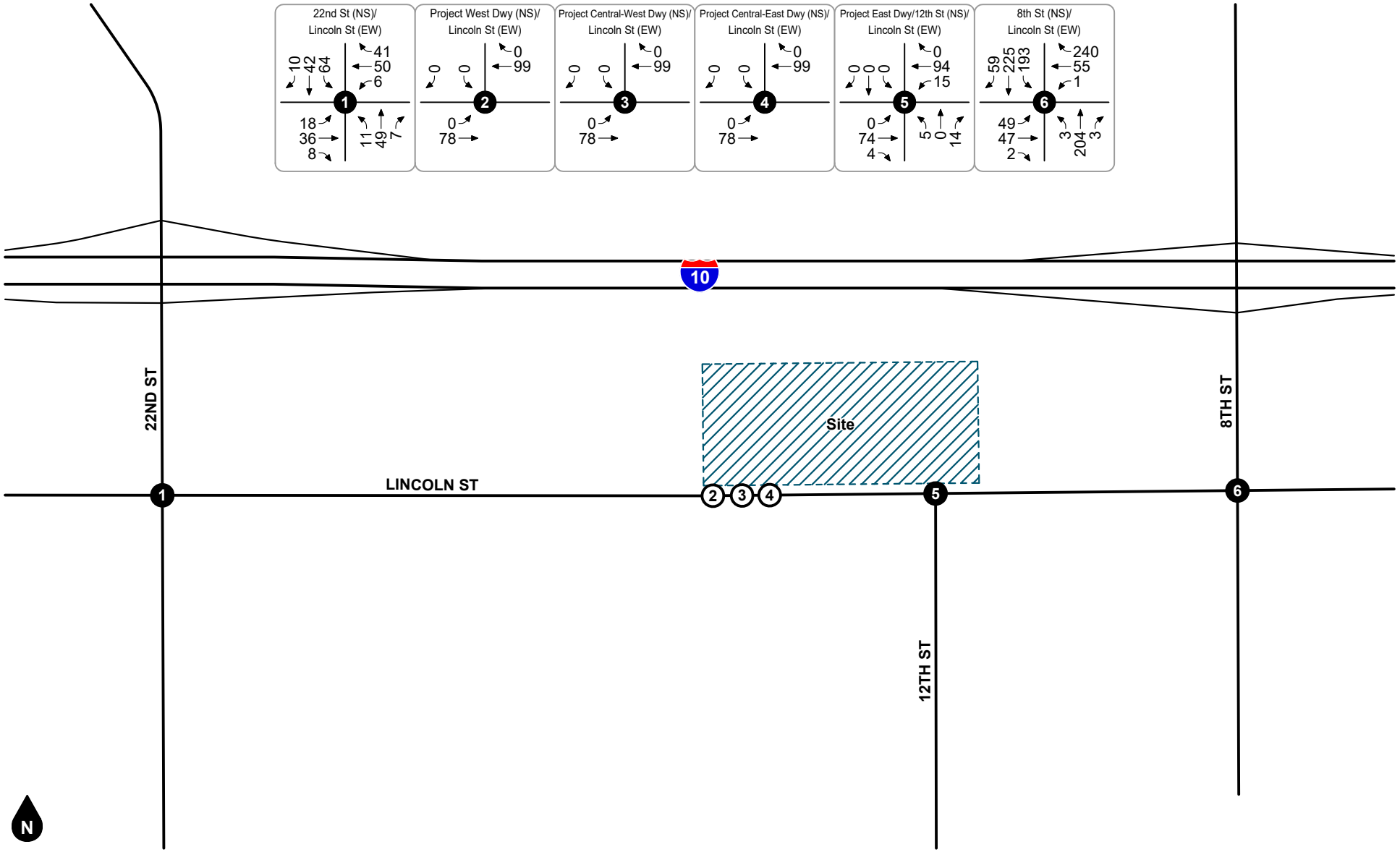
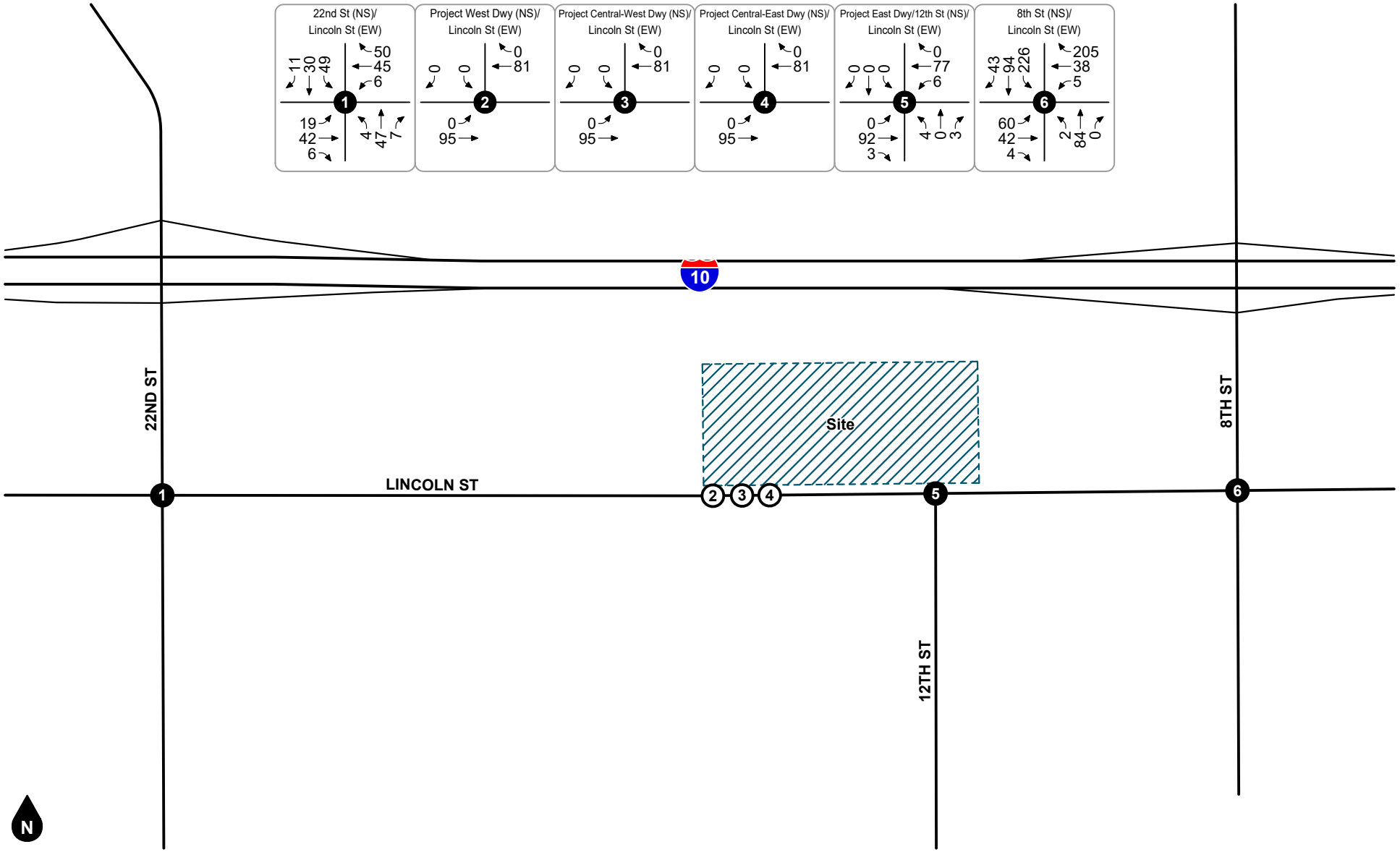


Figure 25
Cumulative Conditions (2025)
AM Peak Hour Intersection Turning Movement Volumes

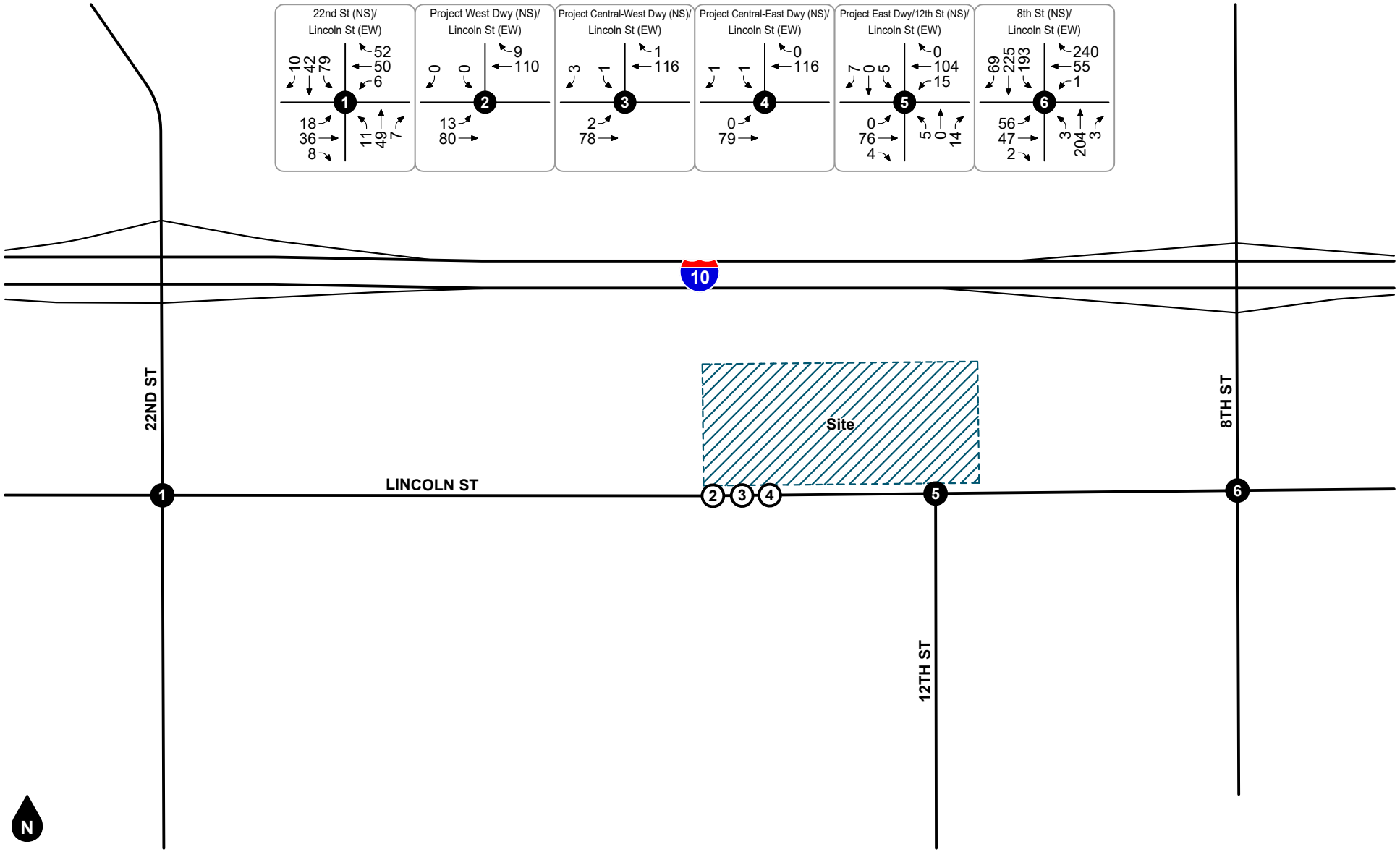


Legend

Study Intersection

(#) Project Driveway

Figure 26
Cumulative Conditions (2025)
PM Peak Hour Intersection Turning Movement Volumes

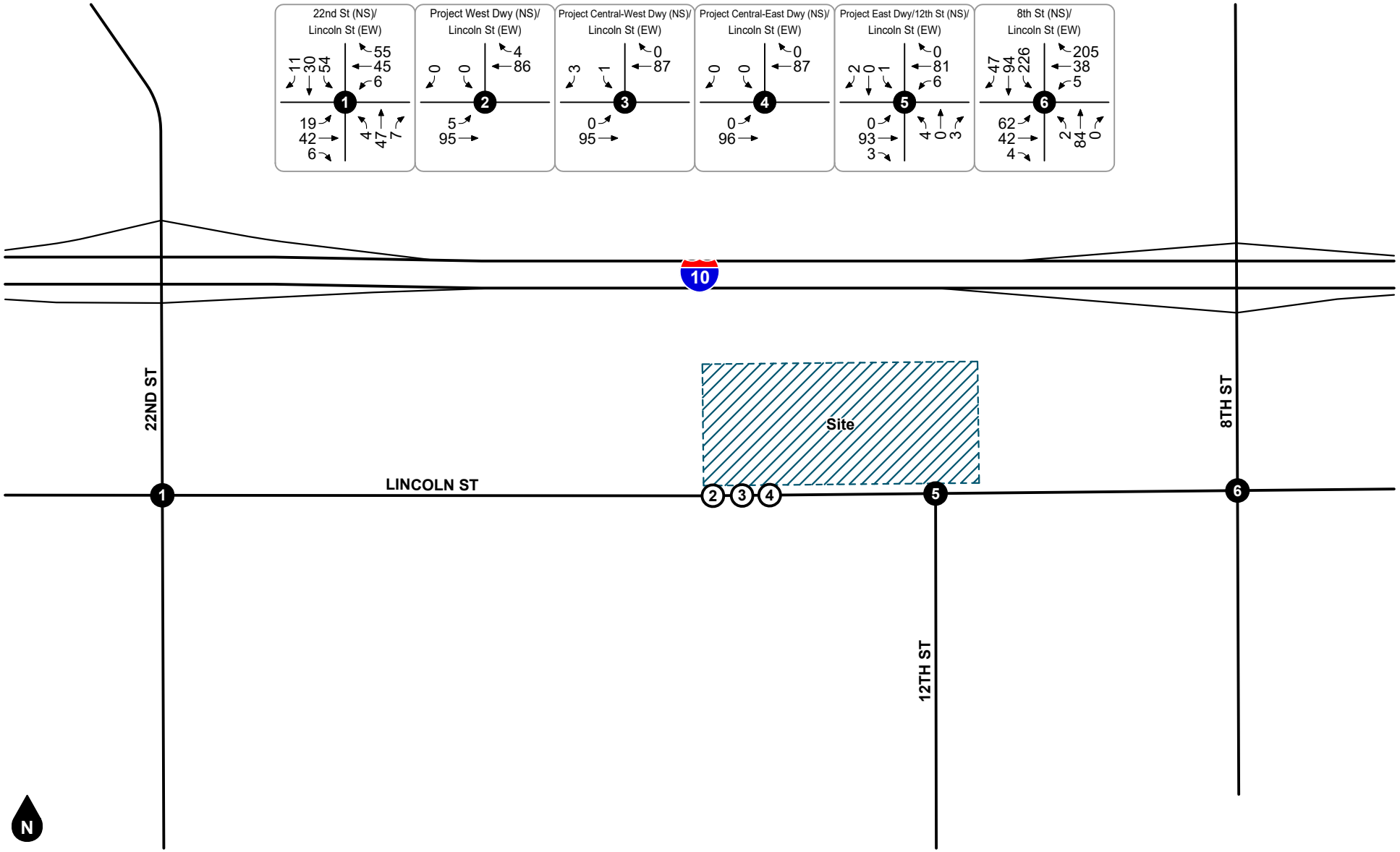


Legend

(#) Study Intersection

(#) Project Driveway

Figure 27
Cumulative Conditions With Project (2025)
AM Peak Hour Intersection Turning Movement Volumes



Legend

Study Intersection

(#) Project Driveway

Figure 28
Cumulative Conditions With Project (2025)
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.

OPENING YEAR CONDITIONS (2025)

The intersection Levels of Service for Opening Year Conditions (2025) 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 Opening Year Conditions (2025), except for the following study intersection that is forecast to operate at unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

The intersection Levels of Service for Opening Year Conditions With Project (2025) are also 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 Opening Year Conditions With Project (2025), except for the following study intersection that is forecast to continue operating at unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

As also shown in Table 5, the addition of project trips does not cause the net change in delay at the study intersections to exceed the City-established criteria; therefore, the proposed project is forecast to cause no substantial operational deficiencies at the study intersections for Opening Year Conditions With Project (2025).

CUMULATIVE CONDITIONS (2025)

The intersection Levels of Service for Cumulative Conditions (2025) 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 Cumulative Conditions (2025), except for the following study intersection that is forecast to operate unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

The intersection Levels of Service for Cumulative Conditions With Project (2025) are also 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 Cumulative Conditions With Project (2025), except for the following study intersection that is forecast to operate at unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

As also shown in Table 6, the addition of project trips does not cause the net change in delay at the study intersections to exceed the City-established criteria; therefore, the proposed project is forecast to cause no substantial operational deficiencies at the study intersections for Cumulative Conditions With Project (2025).

Table 5
Opening Year Conditions (2025) Intersection Levels of Service

Study Intersection	Traffic Control[1]	Without Project				With Project				Net Change		Substantial Impact?
		AM Peak Hour		PM Peak Hour		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]			
1. 22nd St at Lincoln St	AWS	8.0	A	7.9	A	8.2	A	7.9	A	+0.2	0	No
2. Project West Dwy at Lincoln St	CSS	n/a	n/a	n/a	n/a	9.2	A	9.0	A	n/a	n/a	No
3. Project Central-West Dwy at Lincoln St	CSS	n/a	n/a	n/a	n/a	8.9	A	8.8	A	n/a	n/a	No
4. Project Central-East Dwy at Lincoln St	CSS	n/a	n/a	n/a	n/a	9.1	A	9.0	A	n/a	n/a	No
5. Project East Dwy/12th St at Lincoln St	CSS	9.0	A	9.2	A	9.3	A	9.3	A	+0.3	+0.1	No
6. 8th St at Lincoln St	AWS	39.7	E	13.0	B	40.4	E	13.0	B	+0.7	0	No

Notes:

(1) AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown in seconds/vehicle. For intersections with all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 6
Cumulative Conditions (2025) Intersection Levels of Service

Study Intersection	Traffic Control[1]	Without Project				With Project				Net Change		Substantial Impact?
		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 Peak Hour	PM Peak Hour	
1. 22nd St at Lincoln St	AWS	8.3	A	8.0	A	8.4	A	8.1	A	+0.1	+0.1	No
2. Project West Dwy at Lincoln St	CSS	n/a	n/a	n/a	n/a	9.3	A	9.1	A	n/a	n/a	No
3. Project Central-West Dwy at Lincoln St	CSS	n/a	n/a	n/a	n/a	9.1	A	8.9	A	n/a	n/a	No
4. Project Central-East Dwy at Lincoln St	CSS	n/a	n/a	n/a	n/a	9.2	A	9.1	A	n/a	n/a	No
5. Project East Dwy/12th St at Lincoln St	CSS	9.2	A	9.5	A	9.5	A	9.5	A	+0.3	0	No
6. 8th St at Lincoln St	AWS	41.5	E	13.3	B	42.3	E	13.3	B	+0.8	0	No

Notes:

(1) AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown in seconds/vehicle. For intersections with all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

7. GENERAL PLAN AMENDMENT ANALYSIS

The project involves a General Plan Amendment/Zone Change for a portion of the site from Industrial (I) and General Commercial (CC) to Industrial (I). This section evaluates whether the proposed General Plan Amendment has the potential to exceed impacts associated with buildout of the current General Plan.

GENERAL PLAN BUILDOUT TRIP GENERATION COMPARISON

The project is composed of the following three parcels:

- APN 540-190-020 (2.45 acres): Currently designated Industrial (I) - no change proposed
- APN 540-180-026 (8.17 acres): Currently designated Industrial (I) - no change proposed
- APN 540-180-022 (4.30 acres): Currently designated General Commercial (GC) - proposed amendment to Industrial (I)

Table 7 shows a trip generation comparison between maximum buildout potential of the existing General Commercial (GC) and proposed Industrial (I) land use designations based on rates obtained from the ITE *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for shopping plaza (40k-159k) (Land Use Code 821) and general light industrial (Land Use Code 110) were determined to adequately represent the existing and proposed land use designations and were selected for use in this analysis. These land use codes most closely correspond with the General Plan land use designations. The trip generation forecast is determined by multiplying the trip generation rates by the land use quantities.

As shown in Table 7, maximum buildout under the existing General Commercial (GC) land use designation is estimated to generate approximately 6,195 daily trips, including 231 trips during the AM peak hour and 592 trips during the PM peak hour. Maximum buildout under the proposed Industrial (I) land use designation is estimated to generate approximately 547 daily trips, including 83 trips during the AM peak hour and 73 trips during the PM peak hour. Therefore, the proposed General Plan Amendment for APN 540-180-022 is expected to result in approximately 5,648 fewer daily trips generated compared to maximum buildout under the existing General Commercial (GC) land use designation, including 148 fewer trips during the AM peak hour and 519 fewer trips during the PM peak hour.

GENERAL PLAN BUILDOUT ANALYSIS FINDINGS

Since maximum potential buildout of APN 540-180-022 is forecast to generate fewer trips with the proposed Industrial (I) land use designation compared to the existing General Commercial (GC) land use designation, the proposed General Plan Amendment would not exceed impacts associated with buildout of the current General Plan.

Table 7
General Plan Amendment Trip Generation Comparison

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Unit[2]	% In	% Out	Rate	% In	% Out	Rate	Daily
Shopping Plaza (40-150k)	ITE 821	TSF	62%	38%	3.53	48%	52%	9.03	94.49
General Light Industrial	ITE 110	TSF	88%	12%	0.74	14%	86%	0.65	4.87

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity[3]	Unit[2]	In	Out	Total	In	Out	Total	Daily
Existing Land Use									
Shopping Plaza (40-150k)	65.558	TSF	143	88	231	284	308	592	6,195
Proposed Land Use									
General Light Industrial	112.385	TSF	73	10	83	10	63	73	547
NET PROJECT TRIPS GENERATED			**-70**	**-78**	**-148**	**-274**	**-245**	**-519**	**-5,648**

Notes:

(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code

(2) TSF = Thousand Square Feet (Gross Floor Area)

(3) The City of Banning Municipal Code Table 17.12.030 states that General Commercial (GC) has a maximum building coverage of 35% and Industrial (I) has a maximum building coverage of 60%. Parcel 540-180-022 is zoned as General Commercial (GC) and is 4.3 acres (187,308 square feet). This zone at a maximum of 35% General Commercial (GC) equates to 65,558 square feet and at a maximum of 60% Industrial (I)equates to 112,385 square feet.

8. 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 to provide project site access, as necessary based on the City of Banning General Plan classification for Lincoln Street as a Major Highway or Arterial Highway (100 to 110-foot right-of-way):

- Project West Driveway (NS) at Lincoln Street (EW) [Study Intersection #2]
  - Construct one inbound lane for truck ingress only
  - Eastbound: one shared through/left turn lane
  - Westbound: one shared through/right turn lane

- Project Central-West Driveway (NS) at Lincoln Street (EW) [Study Intersection #3]
  - Construct one inbound lane and one outbound lane with southbound stop-control for passenger car access only
  - Eastbound: one shared through/left turn lane
  - Westbound: one shared through/right turn lane

- Project Central-East Driveway (NS) at Lincoln Street (EW) [Study Intersection #4]
  - Construct one outbound lane with southbound stop-control for truck egress only
  - Eastbound: one shared through/left turn lane
  - Westbound: one shared through/right turn lane

- Project East Driveway/12th Street (NS) at Lincoln Street (EW) [Study Intersection #5]
  - Construct one outbound lane with southbound stop-control for truck egress only
  - Northbound: one shared left/through/right turn lane
  - Eastbound: one shared left/through/right turn lane
  - Westbound: one shared left/through/right turn lane

This analysis also assumes the project shall comply with the following or similar conditions as part of the City of Banning 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 Banning.

- 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 Banning.

- 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 Banning/California Department of Transportation sight distance standards.

TRUCK TURNING TEMPLATES

Truck turning path analysis for trucks entering/exiting the project site driveways on Lincoln Street is provided in Appendix F. Based on the truck turning path analysis, the project driveways are expected to adequately accommodate truck turning movements to/from Lincoln Street.

ACCESS GATE QUEUING ANALYSIS

Queuing at the proposed access gate on the westernmost truck ingress only driveway 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 determined from *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972). A 95 percent confidence interval was used to determine the queue that is not exceeded five times out of 100 intervals. Demand flow is based on the number of inbound truck vehicle trips (i.e., non-PCE). The queue length for the service position (i.e., first truck checking in with the guard) is evaluated as 100 feet for extra spacing from the gate, followed by 80 feet of queue for each subsequent truck waiting in the queue (i.e., approximately 6 feet of spacing between each truck). Detailed worksheets are provided in Appendix G.

Table 8 summarizes the access gate queuing analysis for the inbound Project West Driveway on Lincoln As shown in Table 8, the access gate entrance provides approximately 25 feet of storage length from Lincoln Street, which is insufficient to accommodate the forecast queue length of 100 feet (approximately one truck) during the peak hours. The gate exits at the other project driveways provide lengthy drive aisles, which are sufficient to accommodate internal truck queuing for exiting trucks during the peak hours.

It is recommended that the entrance gate at the Project West Driveway is either moved north into the project site to allow for at least 100 feet of queuing capacity from Lincoln Street or always remain open during operating hours so that trucks do not need to wait for the gate to open.

DRIVEWAY SPACING ANALYSIS

Figure 29 shows the distance between project driveways. The central-west project driveway is located approximately 133 feet from the westernmost inbound truck only driveway and 115 feet from the outbound truck only driveway. The easternmost project driveway aligns with 12th Street and is proposed to provide truck egress only. Based on the relatively low turning movement volumes generated by the project, separation of passenger car and truck accesses, and separation of inbound and outbound trucks, the proposed project driveways are expected to function adequately.

Table 8
Access Gate Queuing 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 West Driveway							
AM Peak Hour	9	1	195	0.05	100	25	No
PM Peak Hour	6	1	195	0.03	100	25	No

Notes:

(1) Based on Transportation and Land Development (Institute of Transportation Engineers, 1988) "Applications of Queuing Analysis"; see Appendix G.

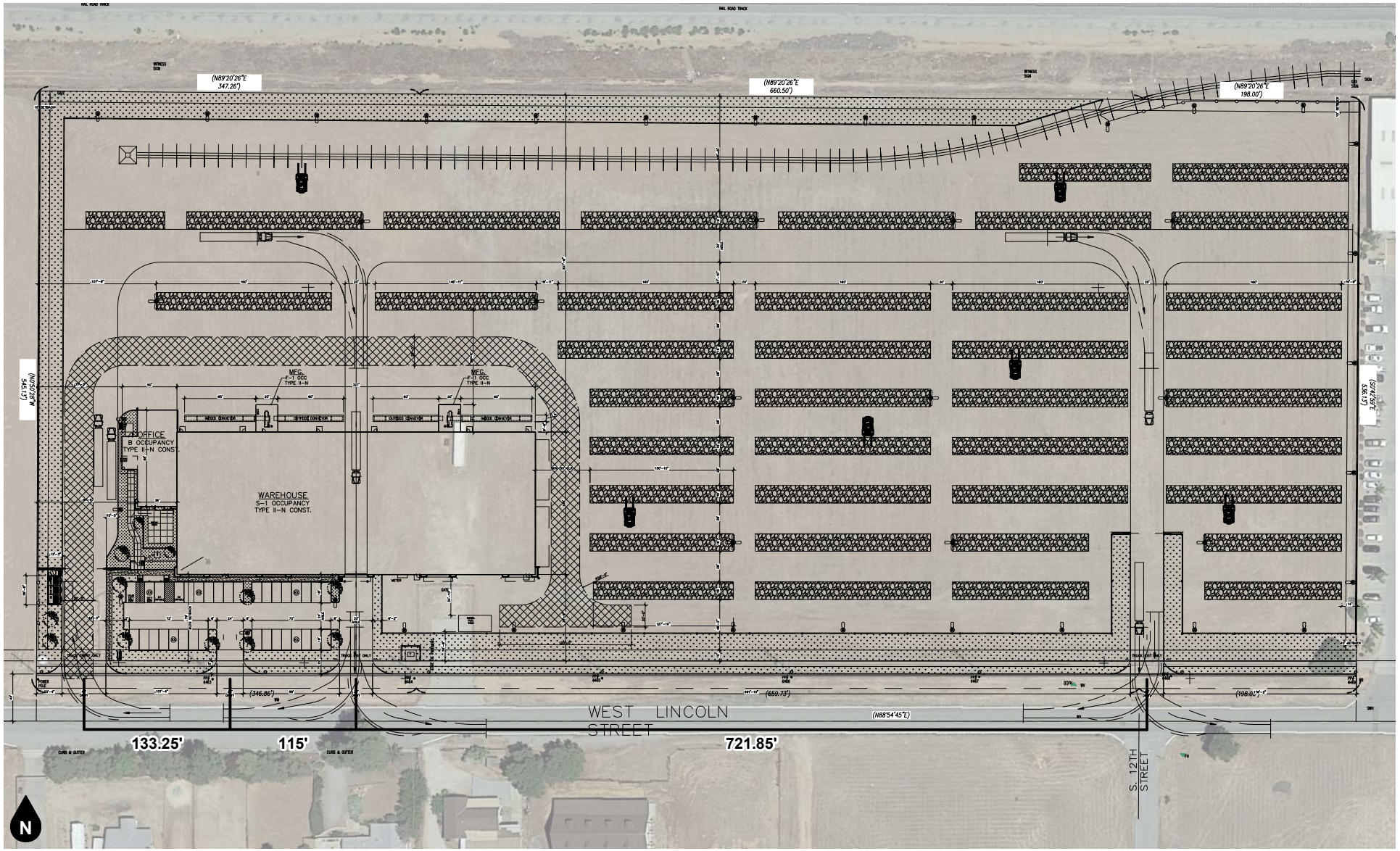


Figure 29
Project Driveway Spacing

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 existing Brown Strauss facility currently generates approximately 191 daily vehicle trips, including 22 vehicle trips during the AM peak hour and 10 vehicle trips during the PM peak hour. The existing Brown Strauss facility currently generates approximately 343 daily PCE trips, including 43 PCE trips during the AM peak hour and 16 PCE trips during the PM peak hour.

The existing Brown Strauss Steel operation located at 14970 Jurupa Avenue in the City of Fontana will be closed with operations moved to this City of Banning location. The City of Fontana location is 23.0-acres which is larger than the 14.92-acre project site. This traffic impact analysis uses the trip generation for the 23-acre site without adjustment for the proposed 14.92-acre site. This will provide for a conservative analysis while conforming with the intent that the project is moving operations and operations will remain similarly to existing status, even if the new location has a smaller square footage.

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 Opening Year Conditions With Project (2025), except for the following study intersection that is forecast to continue operating at unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

The addition of project trips does not cause the net change in delay at the study intersections to exceed the City-established criteria; therefore, the proposed project is forecast to cause no substantial operational deficiencies at the study intersections for Opening Year Conditions With Project (2025).

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Cumulative Conditions With Project (2025), except for the following study intersection that is forecast to operate at unacceptable Levels of Service (E or F):

- 8th Street (NS) at Lincoln Street (EW) - #6 (LOS E - AM)

The addition of project trips does not cause the net change in delay at the study intersections to exceed the City-established criteria; therefore, the proposed project is forecast to cause no substantial operational deficiencies at the study intersections for Cumulative Conditions With Project (2025).

GENERAL PLAN AMENDMENT ANALYSIS

Since maximum potential buildout of APN 540-180-022 is forecast to generate fewer trips with the proposed Industrial (I) land use designation compared to the existing General Commercial (GC) land use designation, the proposed General Plan Amendment would not exceed impacts associated with buildout of the current General Plan.

SITE ACCESS & CIRCULATION

It is recommended that the entrance gate at the Project West Driveway is either moved north into the project site to allow for at least 100 feet of queuing capacity from Lincoln Street or always remain open during operating hours so that trucks do not need to wait for the gate to open.

Based on the relatively low turning movement volumes generated by the project, separation of passenger car and truck accesses, and separation of inbound and outbound trucks, the proposed project driveways are expected to function adequately.

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Volume Count Worksheets
Appendix D Level of Service Worksheets
Appendix E Existing Facility Trip Generation Worksheets
Appendix F Project Site Plan
Appendix G Access Gate Queuing Worksheet

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

TIA SCOPING FORM

This completed Scoping Form must be submitted to City staff for review before initiation of the TIA:

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Brown Strauss Banning Industrial
Project Opening Year:	2025
Project Description:	14.92-acre steel distribution use

	Consultant	Developer
Name:	Ganddini Group, Inc.	Sagecrest Planning+Environmenta
Address:	555 Parkcenter Dr., Suite 225 Santa Ana, CA 92705	27128 Paseo Espada, Suite 1524 San Juan Capistrano, CA 92675
Telephone:	714-795-3100 x 104	352-262-6323
Fax/Email:	bryan@ganddini.com	kribuffo@sagecrestplanning.com

Trip Generation Information:

Source of Trip Generation Data: Traffic counts at similar facility

Current General Plan Land Use	Proposed General Plan Land Use
Industrial/General Commercial	Industrial
Current Zoning	**Proposed Zoning**
Industrial/General Commercial	Industrial

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Peak Hour:	0	0	0	25	18	43
PM Peak Hour:	0	0	0	9	7	16

Trip Internalization: __ Yes ✓ No _____ Percentage (if Yes)

Pass-By Allowance: __ Yes ✓ No _____ Percentage (if Yes)

Diverted Trips Allowance: __ Yes ✓ No _____ Percentage (if Yes)

Potential Screening Checks:

Is your project screened from a Local Transportation Analysis (LTA), pursuant to the criteria in Section 2.1 of the guidelines?

✓ Yes __ No

LTA Screening Justification:

~~Project generates less than 50 peak hour trips. However, the project is undertaking a General Plan Amendment.~~

Is your project screened from a VMT analysis, as per the criteria in Section 2.2 of the guidelines?

✓ Yes __ No

VMT Screening Justification:

~~A separate VMT Screening Assessment has been conducted for the project. The project satisfies the City-established screening criteria for projects forecast to generate fewer than 500 net daily trips.~~

Level of Service Analysis Scoping:

Project Trip Distribution Percentages (Attach exhibit for detailed distribution):

North	South	East	West
0%	0%	40%	60%

- Attach list of Approved and Pending Projects that need to be considered (provided by City staff and adjacent jurisdictions)
- Attach list of study intersections/roadway segments
- Attach site plan
- Note other specific items to be addressed:
  a. Site access
  b. On-site circulation
  c. Parking
  d. Consistency with Plans supporting Bikes/Peds/Transit
  e. Other Included in attached MOU
- Date of Traffic Counts March 2023
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased)

Vehicle Miles Traveled Analysis Scoping:

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used: _____
- Attach City of Banning VMT Screening Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Any other specific issues to be addressed in the LTA or VMT analysis, apart from those stated in the Guidelines?

See attached MOU

MEMORANDUM OF UNDERSTANDING

TO: CITY OF BANNING

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

DATE: June 28, 2023

SUBJECT: Brown Strauss Banning Industrial Project Traffic Impact Analysis Scoping

INTRODUCTION

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

PROJECT DESCRIPTION

Figure 1 shows the project location map. The project site is located at 1219 and 1431 West Lincoln Street (APNs 540-180-020, -022, and -026) in the City of Banning, as exhibited in Figure 2.

The site plan is shown in Appendix A. The 14.92-acre project site is proposed to be developed with a steel distribution use. The total development proposal includes a 45,000 square foot warehouse, a 3,000 square foot office, two 500 square foot enclosed saw sheds, and an outdoor storage yard. The proposed project is anticipated to be constructed and fully operational by year 2025. The project also involves a General Plan Amendment/Zone Change from Industrial (I) and General Commercial (CC) to Industrial (I).

The existing Brown Strauss Steel operation located at 14970 Jurupa Avenue in the City of Fontana will be closed with operations moved to this City of Banning location.

The project site is proposed to provide four access driveways on West Lincoln Street. The project west driveway will be a truck entrance only driveway. The project central-west driveway will be a full access automobile only driveway. The project central-east and east driveways will be truck exit only driveways.

PROJECT TRIP GENERATION

To determine the existing trip generation at the project site, 24-hour inbound/outbound trip counts were taken at the project driveway for the existing Brown Strauss Steel location at 14970 Jurupa Avenue in the City of Fontana in 15-minute increments separating passenger cars and trucks by axle. These traffic counts were conducted on Tuesday, March 7, 2023, Wednesday, March 8, 2023, and Thursday, March 9, 2023. Count worksheets are included in Attachment A.

Table 1 shows the existing Brown Strauss facility inbound trips generated for each of the three days with the average of the three days of counts calculated.

Table 2 shows the existing Brown Strauss facility outbound trips generated for each of the three days with the average of the three days of counts calculated.

Table 3 shows the existing trips generated for the existing Brown Strauss facility using the average trips generated for AM peak hour, PM peak hour and Daily. The trips are separated between passenger cars and trucks by axle.

As shown in Table 3, the existing Brown Strauss facility currently generates approximately 191 daily vehicle trips, including 22 vehicle trips during the AM peak hour and 10 vehicle trips during the PM peak hour.

Truck Trips

In accordance with industry practice and City requirements for truck-oriented uses, the existing Brown Strauss facility trip generation was also calculated in terms of Passenger Car Equivalent (PCE) trips. Truck trips were converted to PCE trips based on the following factors recommended by the City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis (October 2021)*: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

As also shown in Table 3, the existing Brown Strauss facility currently generates approximately 343 daily PCE trips, including 43 PCE trips during the AM peak hour and 16 PCE trips during the PM peak hour.

Table 3 also shows the trips generated per acre for the 23.0-acre existing FedEx facility for informational purposes only.

The existing Brown Strauss Steel operation located at 14970 Jurupa Avenue in the City of Fontana will be closed with operations moved to this City of Banning location. The City of Fontana location is 23.0-acres which is larger than the 14.92-acre project site. Table 4 shows the project trip generation for the proposed project if the project trip generation were devised using trips generated by acre. This has been included for informational purposes only as the traffic impact analysis will use the greater trip generation when comparing site to site versus trip generation by acre. This will provide for a conservative analysis while conforming with the intent that the project is moving operations and operations will remain similarly to existing status, even if the new location has a smaller square footage.

PROJECT TRIP DISTRIBUTION

Figure 3 to Figure 5 illustrate the forecast outbound and inbound directional distribution patterns of project-generated truck trips and passenger car trips.

STUDY AREA

Based on the City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis (October 2021)* guidelines, intersections identified for analysis typically include signalized intersections at which a project is forecast to contribute 50 or more trips during the AM or PM peak hours. The study area is proposed to consist of the following six (6) study intersections, even if the project may not contribute 50 or more trips during either peak hour.

Study Intersections (Figure 1)

1. 22nd Street (NS) at Lincoln Street (EW)
2. Project West Driveway (NS) at Lincoln Street (EW)
3. Project Central-West Driveway (NS) at Lincoln Street (EW)
4. Project Central-East Driveway (NS) at Lincoln Street (EW)
5. Project East Driveway/12th Street (NS) at Lincoln Street (EW)
6. 8th Street (NS) at Lincoln Street (EW)

TRAFFIC COUNTS

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

ANALYSIS SCENARIOS

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

- Existing Conditions [2023]
- Opening Year Conditions [2025]
- Opening Year Conditions With Project [2025]
- Cumulative Conditions [2025]
- Cumulative Conditions With Project [2025]
- Horizon Year Conditions [2045]
- Horizon Year Conditions With Project [2045]

ANALYSIS METHODOLOGY

To assess the performance of an intersection, the City of Banning uses the intersection delay method based on procedures contained in the Highway Capacity Manual (Transportation Research Board, 6th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service (LOS). 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 Level of Service analysis shall be performed using the Vistro software.

PERFORMANCE STANDARDS

The City of Banning has established LOS D as the minimum acceptable Level of Service along all City maintained roads (including intersections).

OPERATIONAL THRESHOLDS

For study intersections within the City of Banning jurisdiction, a traffic impact occurs if:

a) The addition of project traffic causes the intersection LOS to degrade from acceptable LOS D or better to an unacceptable LOS E or F.

b) The addition of project traffic causes the peak hour delay to increase as follows:

- LOS A/B by 10 seconds;
- LOS C by 8 seconds;
- LOS D by 5 seconds;
- LOS E by 2 seconds;
- LOS F by 1 second

If either of the above conditions is satisfied, improvements should be identified that achieve the following:

- Improving traffic operations to LOS D for case a, above.
- Improving traffic operations to offset the increase in delay for case b, above.

If a project is forecast to cause an operational traffic impact, feasible improvements that will reduce the impact to an acceptable LOS are identified. Improvements can be in many forms, including the addition of lanes, traffic control modification, or demand management measures.

FORECASTING METHODOLOGY

Ambient Growth Rate

To account for area-wide ambient growth, the Opening Year Conditions and Cumulative Conditions will include a 2% annual growth for 2 years (total growth factor = 1.0404) over the 2023 base volumes. City staff shall confirm that this growth rate is applicable and refine as necessary.

Other Cumulative Projects

A list of pending and approved cumulative development projects will be obtained from City of Banning staff. 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 Cumulative Conditions scenarios.

GENERAL PLAN AMENDMENT ANALYSIS

The project is composed of the following three parcels:

- 540-190-020: 2.45 acres: Industrial (I) zoned; no change proposed
- 540-180-026: 8.17 acres; Industrial (I) zoned; no change proposed
- 540-180-022: 4.30 acres; General Commercial (GC) zoned; proposed rezone to Industrial (I)

Table 5 shows a project trip generation comparison for maximum buildout potential between the existing zoning of General Commercial (GC) and the proposed zoning of Industrial (I).

Table 5 shows the General Plan land use trip generation based upon trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for shopping plaza (40k-159k) (Land Use Code 821) and general light industrial (Land Use Code 110) were determined to adequately represent the existing and proposed land uses and were selected for use in this analysis. The project trip generation forecast is determined by multiplying the trip generation rates by the land use quantities.

As shown in Table 5, maximum buildout under the existing General Commercial (GC) land use is proposed to generate approximately 6,195 daily vehicle trips, including 231 vehicle trips during the AM peak hour and 592 vehicle trips during the PM peak hour. Maximum buildout under the proposed Industrial (I) land use is proposed to generate approximately 547 daily vehicle trips, including 83 vehicle trips during the AM peak hour and 73 vehicle trips during the PM peak hour. The existing General Plan land use compared to the proposed land use is proposed to generate approximately 5,648 less daily vehicle trips, including 148 less vehicle trips during the AM peak hour and 519 less vehicle trips during the PM peak hour.

Thus, the proposed rezoning of 540-180-022 from General Commercial (GC) to Industrial (I) is anticipated to have a reduction in trip generation for the AM peak hour, PM peak hour, and Daily, and Horizon Year impacts would not be increased beyond what is anticipated in the approved City of Banning General Plan.

VEHICLES MILES TRAVELED (VMT) ANALYSIS

A separate VMT screening assessment will be performed for the project.

TRUCK TURNING TEMPLATES

Truck turning templates will be provided overlayed on the project site plan to confirm ingress and egress at the project driveways.

ON-SITE CIRCULATION ANALYSIS

All project driveways will be evaluated based on lane configurations, traffic control, and potential turn restrictions.

The analysis will include a left turn storage analysis, access control analysis, and an analysis of spacing between driveways to determine whether the number of driveways needs to be consolidated. In addition, a queuing analysis at the gates will be performed to confirm whether sufficient storage is provided on-site to prevent spillback onto adjacent roadways. This will be performed at each gated ingress point based on the Crommelin methodology.

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 (1 of 3)
Survey Site Inbound Trips Generated Summary

Time Period	Number of Inbound Trips Generated - Project Driveway on Jurupa Avenue																			
	Tuesday (March 7, 2023)					Wednesday (March 8, 2023)					Thursday (March 9, 2023)					Average				
	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total
		2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle	
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM - 1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM - 1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM - 1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM - 2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM - 2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM - 2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM - 2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM - 3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM - 3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM - 3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM - 4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM - 4:30 AM	3	0	0	0	3	5	0	0	0	5	3	0	0	0	3	4	0	0	0	4
4:30 AM - 4:45 AM	11	0	0	0	11	10	0	0	0	10	8	0	0	1	9	10	0	0	1	11
4:45 AM - 5:00 AM	6	0	0	2	8	5	0	0	2	7	6	0	0	1	7	6	0	0	2	8
5:00 AM - 5:15 AM	1	0	0	4	5	0	0	0	3	3	1	0	0	2	3	1	0	0	3	4
5:15 AM - 5:30 AM	0	0	0	0	0	1	0	0	2	3	1	0	0	0	1	1	0	0	1	2
5:30 AM - 5:45 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	1	1	0	0	0	2	2
5:45 AM - 6:00 AM	0	0	0	1	1	0	0	0	2	2	0	0	0	1	1	0	0	0	2	2
6:00 AM - 6:15 AM	1	0	0	2	3	0	0	0	0	0	0	0	0	3	3	1	0	0	2	3
6:15 AM - 6:30 AM	1	1	0	1	3	1	0	0	0	1	0	0	0	1	1	1	1	0	1	3
6:30 AM - 6:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1
6:45 AM - 7:00 AM	1	0	0	0	1	1	1	1	0	3	0	1	1	1	3	1	1	1	1	4
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
7:15 AM - 7:30 AM	0	0	0	2	2	0	1	0	2	3	0	0	0	0	0	0	1	0	2	3
7:30 AM - 7:45 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	1	1	0	0	2
7:45 AM - 8:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
8:00 AM - 8:15 AM	0	1	0	0	1	0	0	0	0	0	1	1	0	1	3	1	1	0	1	3
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
8:30 AM - 8:45 AM	1	0	1	0	2	0	0	0	0	0	3	0	0	3	6	2	0	1	1	4

Table 1 (2 of 3)
Survey Site Inbound Trips Generated Summary

Time Period	Number of Inbound Trips Generated - Project Driveway on Jurupa Avenue																			
	Tuesday (March 7, 2023)					Wednesday (March 8, 2023)					Thursday (March 9, 2023)					Average				
	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total
		2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle	
8:45 AM - 9:00 AM	0	1	0	3	4	0	0	1	1	2	0	0	0	0	0	0	1	1	2	4
9:00 AM - 9:15 AM	0	1	0	0	1	1	0	0	2	3	0	0	0	1	1	1	1	0	1	3
9:15 AM - 9:30 AM	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	1	2
9:30 AM - 9:45 AM	1	0	0	0	1	0	1	0	1	2	0	1	0	1	2	1	1	0	1	3
9:45 AM - 10:00 AM	2	1	0	0	3	2	0	0	2	4	1	0	0	0	1	2	1	0	1	4
10:00 AM - 10:15 AM	2	0	0	1	3	1	1	0	0	2	0	0	0	0	0	1	1	0	1	3
10:15 AM - 10:30 AM	1	1	0	1	3	1	0	0	0	1	1	0	0	1	2	1	1	0	1	3
10:30 AM - 10:45 AM	1	0	0	1	2	0	0	0	0	0	1	0	0	0	1	1	0	0	1	2
10:45 AM - 11:00 AM	0	0	0	0	0	0	1	0	2	3	0	0	0	0	0	0	1	0	1	2
11:00 AM - 11:15 AM	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	1	2
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	3	0	0	0	3	0	0	0	4	4	1	0	0	1	2	2	0	0	2	4
11:45 AM - 12:00 PM	0	0	0	1	1	1	3	0	1	5	0	0	0	1	1	1	1	0	1	3
12:00 PM - 12:15 PM	0	0	0	2	2	1	0	0	1	2	0	0	0	0	0	1	0	0	1	2
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2	0	0	1	1	2
12:30 PM - 12:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1
1:00 PM - 1:15 PM	1	0	0	1	2	0	0	0	1	1	0	0	0	1	1	1	0	0	1	2
1:15 PM - 1:30 PM	1	0	0	2	3	0	0	0	1	1	0	0	0	0	0	1	0	0	1	2
1:30 PM - 1:45 PM	1	0	0	0	1	0	0	0	1	1	2	0	0	0	2	1	0	0	1	2
1:45 PM - 2:00 PM	2	0	0	0	2	1	0	0	1	2	0	1	1	0	2	1	1	1	1	4
2:00 PM - 2:15 PM	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2
2:15 PM - 2:30 PM	3	0	0	0	3	2	0	0	0	2	0	0	0	1	1	2	0	0	1	3
2:30 PM - 2:45 PM	0	0	0	0	0	4	0	0	0	4	4	0	0	0	4	3	0	0	0	3
2:45 PM - 3:00 PM	1	1	0	0	2	2	1	0	0	3	2	0	0	0	2	2	1	0	0	3
3:00 PM - 3:15 PM	2	0	0	0	2	0	0	0	0	0	2	0	0	0	2	2	0	0	0	2
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1
3:45 PM - 4:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	1	0	1	2
5:30 PM - 5:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1

Table 1 (3 of 3)
Survey Site Inbound Trips Generated Summary

Time Period	Number of Inbound Trips Generated - Project Driveway on Jurupa Avenue																			
	Tuesday (March 7, 2023)					Wednesday (March 8, 2023)					Thursday (March 9, 2023)					Average				
	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total
		2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle	
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1
6:00 PM - 6:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
6:15 PM - 6:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
6:30 PM - 6:45 PM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1
6:45 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM - 7:15 PM	1	0	0	1	2	0	0	0	1	1	0	0	0	1	1	1	0	0	1	2
7:15 PM - 7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM - 7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM - 8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM - 8:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 PM - 8:30 PM	1	0	0	0	1	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2
8:30 PM - 8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM - 9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM - 9:15 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9:15 PM - 9:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
9:30 PM - 9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	55	7	1	32	95	45	10	2	41	98	43	7	3	28	81	48	8	2	34	92
AM Peak Hour*	8:00 AM - 9:00 AM															3	2	2	5	12
PM Peak Hour*	4:30 PM - 5:30 PM															0	2	0	2	4

Notes:

* Peak hours shown for peak of adjacent street traffic (one hour between 7-9 AM and one hour between 4-6 PM) based on sum of inbound plus outbound trips.

Table 2 (1 of 3)
Survey Site Outbound Trips Generated Summary

Time Period	Number of Inbound Trips Generated - Project Driveway on Jurupa Avenue																			
	Tuesday (March 7, 2023)					Wednesday (March 8, 2023)					Thursday (March 9, 2023)					Average				
	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total	Passenger Cars	Trucks			Total
		2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle			2-Axle	3-Axle	4+-Axle	
12:00 AM - 12:15 AM	1	0	0	0	1	1	0	0	0	1	2	0	0	0	2	2	0	0	0	2
12:15 AM - 12:30 AM	0	0	0	0	0	2	0	0	0	2	3	0	0	0	3	2	0	0	0	2
12:30 AM - 12:45 AM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	1	0	0	0	1
12:45 AM - 1:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1:00 AM - 1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM - 1:30 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
1:30 AM - 1:45 AM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1:45 AM - 2:00 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
2:00 AM - 2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM - 2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM - 2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM - 3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM - 3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM - 3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM - 4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM - 4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM - 4:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
4:45 AM - 5:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 AM - 5:15 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
5:15 AM - 5:30 AM	0	0	0	2	2	0	0	0	3	3	0	0	0	1	1	0	0	0	2	2
5:30 AM - 5:45 AM	0	0	1	4	5	0	0	0	2	2	0	0	0	3	3	0	0	1	3	4
5:45 AM - 6:00 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	1	1	1	0	0	1	2
6:00 AM - 6:15 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
6:15 AM - 6:30 AM	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	2	2
6:30 AM - 6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
6:45 AM - 7:00 AM	0	0	0	4	4	0	0	0	0	0	0	0	1	2	3	0	0	1	2	3
7:00 AM - 7:15 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1
7:15 AM - 7:30 AM	1	0	0	0	1	0	1	0	1	2	0	0	0	4	4	1	1	0	2	4
7:30 AM - 7:45 AM	0	0	0	0	0	0	1	0	2	3	0	0	0	0	0	0	1	0	1	2
7:45 AM - 8:00 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
8:00 AM - 8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
8:15 AM - 8:30 AM	1	0	0	0	1	1	0	0	0	1	3	1	0	0	4	2	1	0	0	3
8:30 AM - 8:45 AM	0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	1	0	0	1	2

Table 2 (2 of 3)
Survey Site Outbound Trips Generated Summary

	Number of Inbound Trips Generated - Project Driveway on Jurupa Avenue																			
	Tuesday (March 7, 2023)					Wednesday (March 8, 2023)					Thursday (March 9, 2023)					Average				
8:45 AM - 9:00 AM	1	1	0	0	2	0	0	0	1	1	1	0	0	0	1	1	1	0	1	3
9:00 AM - 9:15 AM	0	0	0	1	1	1	1	1	0	3	0	1	0	2	3	1	1	1	1	4
9:15 AM - 9:30 AM	1	1	0	1	3	0	0	0	0	0	0	0	0	2	2	1	1	0	1	3
9:30 AM - 9:45 AM	2	0	0	0	2	1	0	0	2	3	0	0	0	2	2	1	0	0	2	3
9:45 AM - 10:00 AM	0	1	0	1	2	0	1	0	1	2	2	0	0	0	2	1	1	0	1	3
10:00 AM - 10:15 AM	0	1	0	0	1	1	2	0	2	5	0	1	0	0	1	1	2	0	1	4
10:15 AM - 10:30 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	0	0	1	2
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
11:15 AM - 11:30 AM	1	0	0	0	1	0	0	0	3	3	1	0	0	0	1	1	0	0	1	2
11:30 AM - 11:45 AM	2	0	0	0	2	2	0	0	0	2	0	1	0	0	1	2	1	0	0	3
11:45 AM - 12:00 PM	1	0	0	1	2	0	2	0	0	2	0	0	0	1	1	1	1	0	1	3
12:00 PM - 12:15 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
12:15 PM - 12:30 PM	0	1	0	0	1	0	0	0	4	4	2	0	1	0	3	1	1	1	2	5
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	1	1	1	0	0	1	2	1	0	0	1	2
12:45 PM - 1:00 PM	1	0	0	1	2	0	0	0	2	2	0	0	0	0	0	1	0	0	1	2
1:00 PM - 1:15 PM	1	0	0	1	2	0	0	0	0	0	2	0	0	0	2	1	0	0	1	2
1:15 PM - 1:30 PM	0	0	0	2	2	0	1	0	1	2	0	0	0	1	1	0	1	0	2	3
1:30 PM - 1:45 PM	0	0	0	0	0	10	0	0	0	10	11	0	0	0	11	7	0	0	0	7
1:45 PM - 2:00 PM	0	0	0	1	1	6	0	0	1	7	2	1	0	1	4	3	1	0	1	5
2:00 PM - 2:15 PM	15	0	0	1	16	1	0	0	0	1	0	0	1	0	1	6	0	1	1	8
2:15 PM - 2:30 PM	1	0	0	1	2	1	0	0	0	1	0	0	0	0	0	1	0	0	1	2
2:30 PM - 2:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2:45 PM - 3:00 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2
3:00 PM - 3:15 PM	2	1	0	0	3	0	1	0	0	1	0	1	0	0	1	1	1	0	0	2
3:15 PM - 3:30 PM	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	1	1	0	0	2
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	1	1	0	0	2
4:30 PM - 4:45 PM	2	0	0	0	2	3	0	0	0	3	1	0	0	0	1	2	0	0	0	2
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	1	0	0	2
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	1	1	0	0	2
5:30 PM - 5:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

Table 2 (3 of 3)
Survey Site Outbound Trips Generated Summary

	Number of Inbound Trips Generated - Project Driveway on Jurupa Avenue																			
	Tuesday (March 7, 2023)					Wednesday (March 8, 2023)					Thursday (March 9, 2023)					Average				
5:45 PM - 6:00 PM	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	1	2
6:00 PM - 6:15 PM	0	1	0	1	2	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
6:15 PM - 6:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1
6:30 PM - 6:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
6:45 PM - 7:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
7:00 PM - 7:15 PM	0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	1	0	0	1	2
7:15 PM - 7:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
7:30 PM - 7:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
7:45 PM - 8:00 PM	0	0	0	0	0	0	0	0	2	2	1	0	0	0	1	1	0	0	1	2
8:00 PM - 8:15 PM	2	0	0	0	2	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
8:15 PM - 8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM - 8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM - 9:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
9:00 PM - 9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM - 9:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9:30 PM - 9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	1	0	0	0	1	1	0	0	0	1	3	0	0	0	3	2	0	0	0	2
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	4	0	0	0	4	5	0	0	0	5	3	0	0	0	3
11:45 PM - 12:00 AM	3	0	0	0	3	1	0	0	0	1	3	0	0	0	3	3	0	0	0	3
Daily	56	9	1	33	99	44	14	1	41	100	51	9	3	29	92	51	11	2	35	99
AM Peak Hour*	8:00 AM - 9:00 AM															4	3	0	3	10
PM Peak Hour*	4:30 PM - 5:30 PM															4	2	0	0	6

Notes:

* Peak hours shown for peak of adjacent street traffic (one hour between 7-9 AM and one hour between 4-6PM) based on sum of inbound plus outbound trips.

Table 3
Project Trips Generated

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Existing Brown Strauss Facility	Counts	23.00 AC							
Passenger Cars			3	4	7	0	4	4	99
Trucks (2-Axle)			2	3	5	2	2	4	19
Trucks (3-Axle)			2	0	2	0	0	0	4
Trucks (4+-Axle)			5	3	8	2	0	2	69
Subtotal			12	10	22	4	6	10	191
Trips Generated in Passenger Car Equivalents[3]									
Existing Brown Strauss Facility	Counts	23.00 AC							
Passenger Cars			3	4	7	0	4	4	99
Trucks (2-Axle)			3	5	8	3	3	6	29
Trucks (3-Axle)			4	0	4	0	0	0	8
Trucks (4+-Axle)			15	9	24	6	0	6	207
Subtotal			25	18	43	9	7	16	343

Trips Generation Rates Per Acre									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Existing Brown Strauss Facility	Counts	1.0 AC							
Passenger Cars			0.13	0.17	0.30	0.00	0.17	0.17	4.30
Trucks (2-Axle)			0.09	0.13	0.22	0.09	0.09	0.18	0.83
Trucks (3-Axle)			0.09	0.00	0.09	0.00	0.00	0.00	0.17
Trucks (4+-Axle)			0.22	0.13	0.35	0.09	0.00	0.09	3.00
Subtotal			0.52	0.43	0.95	0.17	0.26	0.43	8.30

Notes:
1. Traffic counts at project driveway (see Tables 1 and 2).
2. AC = Acres
3. Source: City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis* (October 2021).
   2-Axle = 1.5; 3-Axle = 2.0; 4+-Axle = 3.0

Table 4
Project Trips Generated (By Acreage)

Trips Generation Rates Per Acre									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Existing Brown Strauss Facility	Counts	1.0 AC							
Passenger Cars			0.13	0.17	0.30	0.00	0.17	0.17	4.30
Trucks (2-Axle)			0.09	0.13	0.22	0.09	0.09	0.18	0.83
Trucks (3-Axle)			0.09	0.00	0.09	0.00	0.00	0.00	0.17
Trucks (4+-Axle)			0.22	0.13	0.35	0.09	0.00	0.09	3.00
Subtotal			0.52	0.43	0.95	0.17	0.26	0.43	8.30

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Existing Brown Strauss Facility	Counts	14.92 AC							
Passenger Cars			2	3	5	0	3	3	64
Trucks (2-Axle)			1	2	3	1	1	2	12
Trucks (3-Axle)			1	0	1	0	0	0	3
Trucks (4+-Axle)			3	2	5	1	0	1	45
Subtotal			7	7	14	2	4	6	124
Trips Generated in Passenger Car Equivalents[3]									
Existing Brown Strauss Facility	Counts	14.92 AC							
Passenger Cars			2	3	5	0	3	3	64
Trucks (2-Axle)			2	3	5	2	2	4	18
Trucks (3-Axle)			2	0	2	0	0	0	6
Trucks (4+-Axle)			9	6	15	3	0	3	135
Subtotal			15	12	27	5	5	10	223

Notes:
1. Traffic counts at project driveway (see Tables 1, 2 and 3).
2. AC = Acres
3. Source: City of Banning *Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Traveled Analysis* (October 2021).
   2-Axle = 1.5; 3-Axle = 2.0; 4+-Axle = 3.0

Table 5
General Plan Amendment Trip Generation Comparison

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Unit[2]	% In	% Out	Rate	% In	% Out	Rate	Daily
Shopping Plaza (40-150k)	ITE 821	TSF	62%	38%	3.53	48%	52%	9.03	94.49
General Light Industrial	ITE 110	TSF	88%	12%	0.74	14%	86%	0.65	4.87

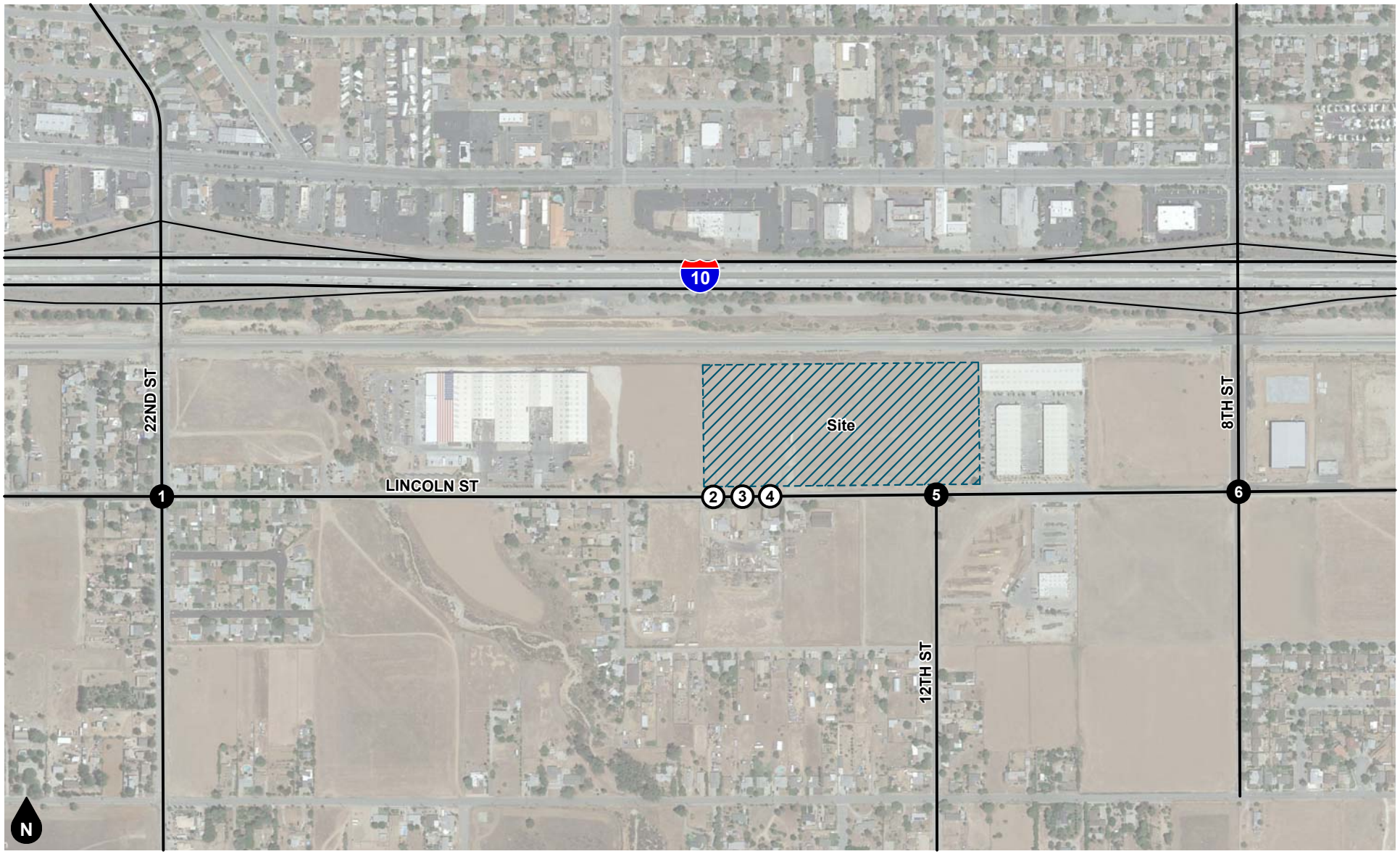
Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity[3]	Unit[2]	In	Out	Total	In	Out	Total	Daily
Existing Land Use									
Shopping Plaza (40-150k)	65.558	TSF	143	88	231	284	308	592	6,195
Proposed Land Use									
General Light Industrial	112.385	TSF	73	10	83	10	63	73	547
NET PROJECT TRIPS GENERATED			**-70**	**-78**	**-148**	**-274**	**-245**	**-519**	**-5,648**

Notes:

(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code

(2) TSF = Thousand Square Feet (Gross Floor Area)

(3) The City of Banning Municipal Code Table 17.12.030 states that General Commercial (GC) has a maximum building coverage of 35% and Industrial (I) has a maximum building coverage of 60%. Parcel 540-180-022 is zoned as General Commercial (GC) and is 4.3 acres (187,308 square feet). This zone at a maximum of 35% General Commercial (GC) = 65.558 square feet and at a maximum of 60% Industrial (I) is 112, 385 square feet.



Legend

(#) Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

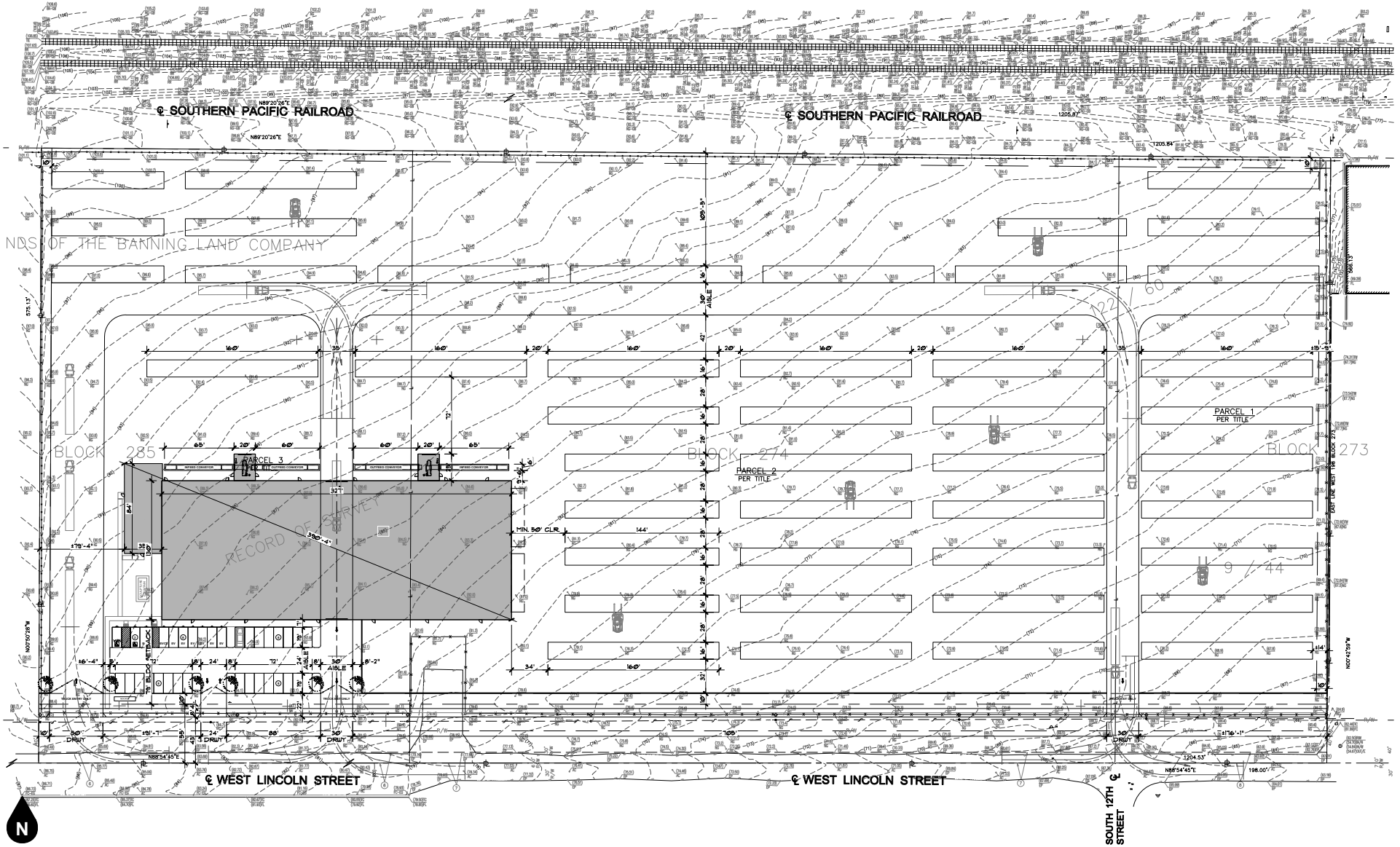


Figure 2
Site Plan

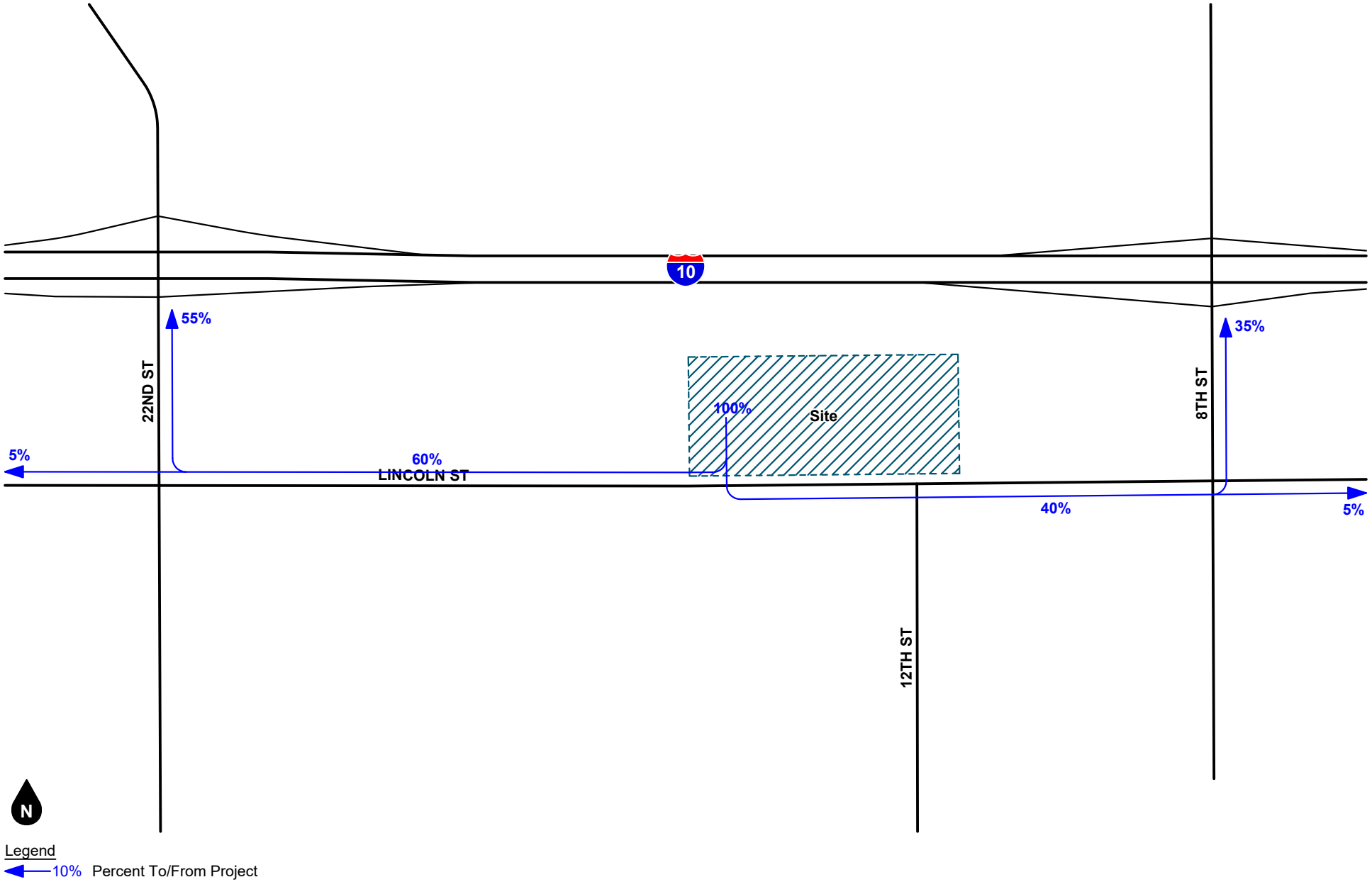


Figure 3
Project Trip Distribution - Passenger Cars

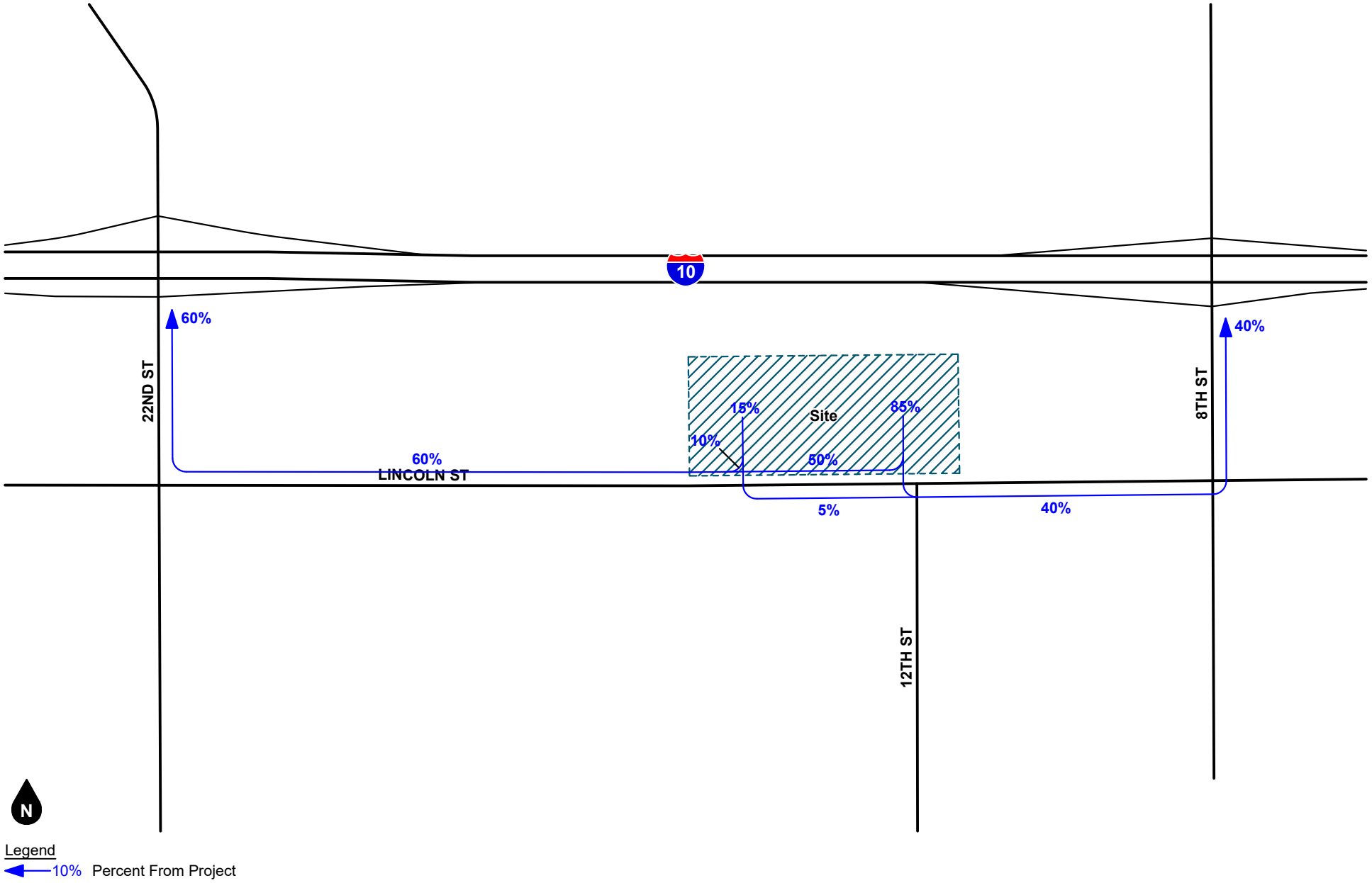


Figure 4
Project Outbound Trip Distribution - Trucks

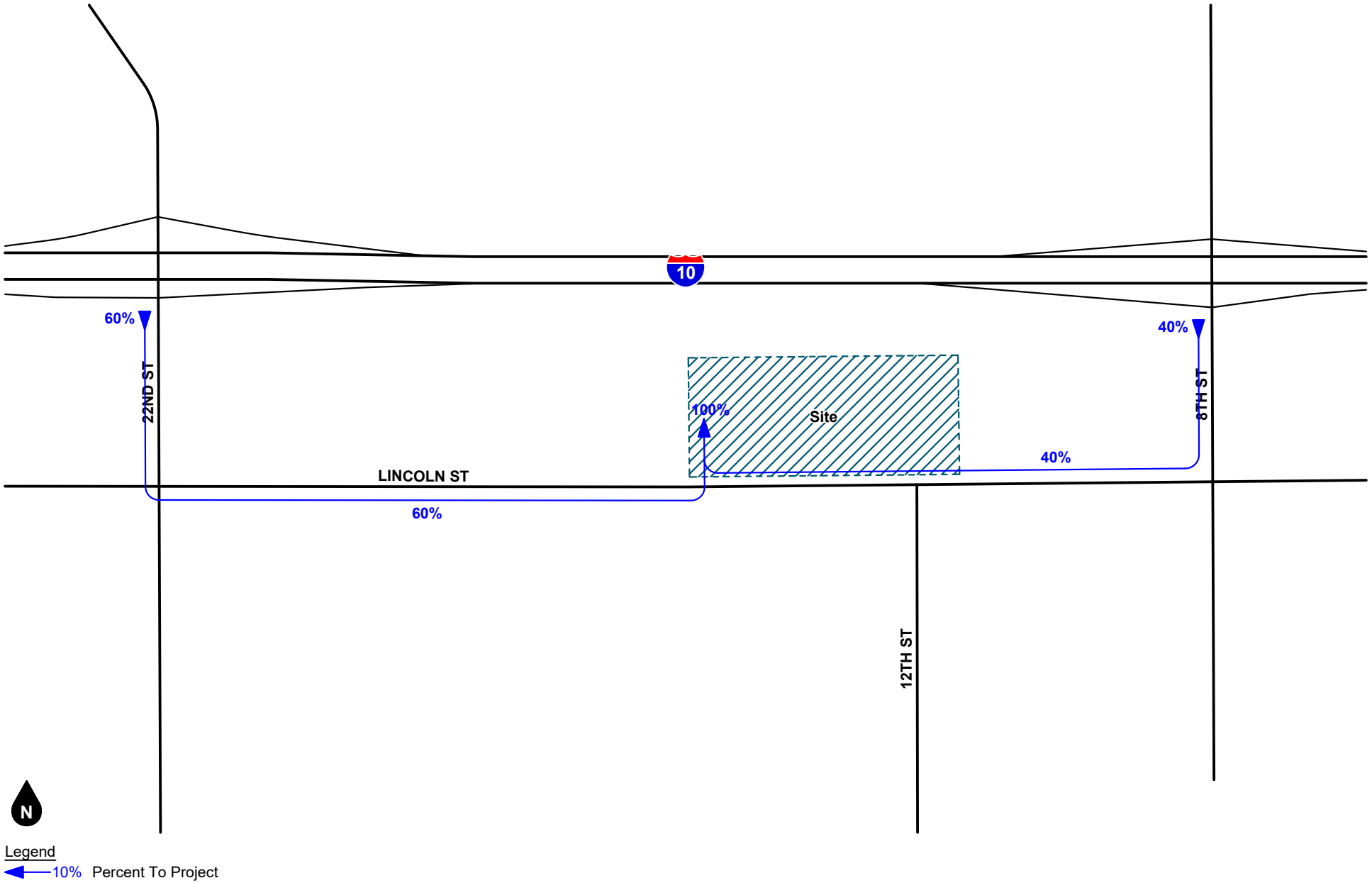
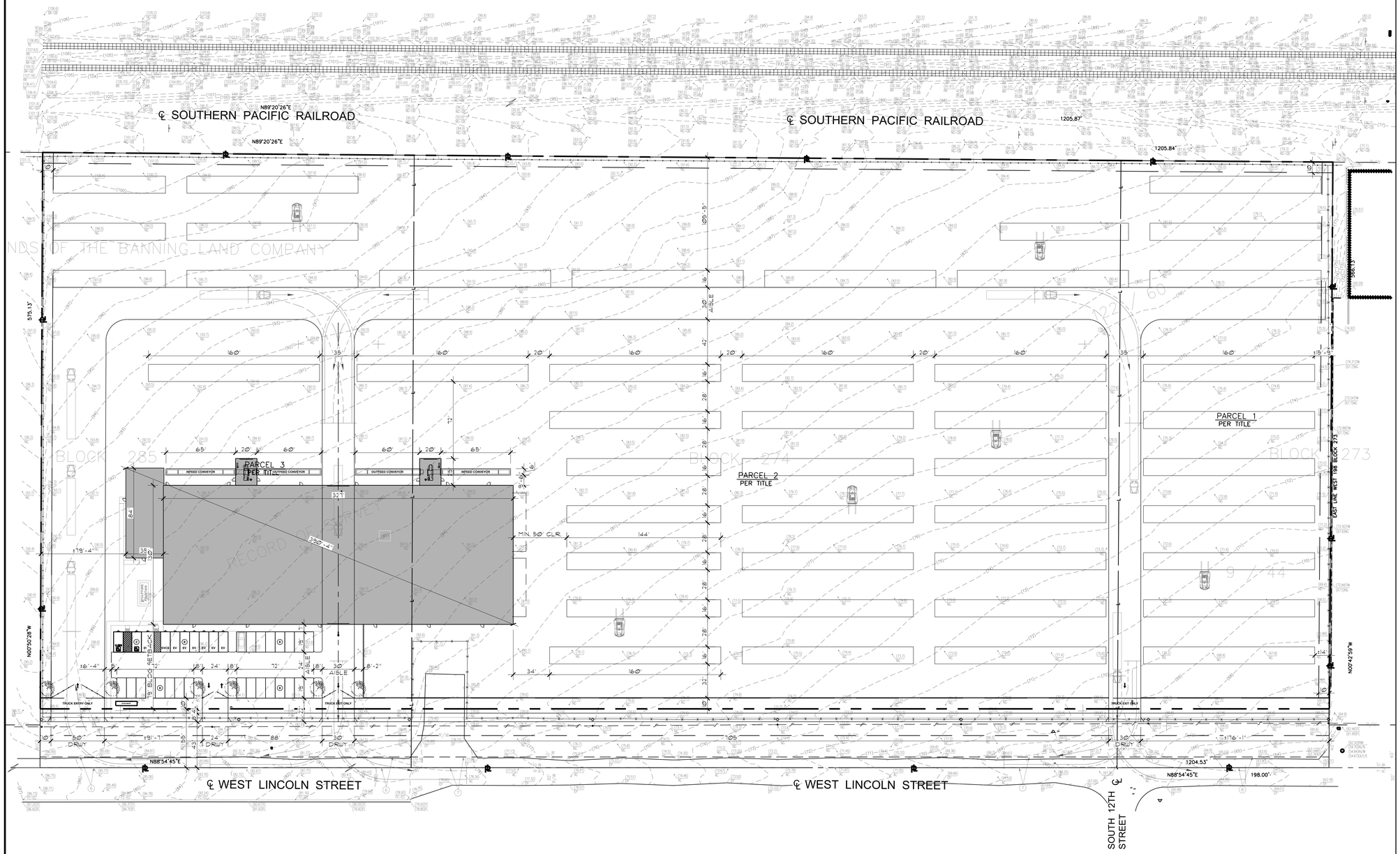


Figure 5
Project Inbound Trip Distribution - Trucks

Appendix A

Site Plan



N

KEYNOTES

NOTES

A. CONSTRUCTION IN THE PUBLIC RIGHT OF WAY AND PROJECTION BEYOND THE PROPERTY LINES OR INTO THE ALLEYS SHALL COMPLY WITH COUNTY OF LOS ANGELES BUILDING CODE CHAPTER 32.

B. PEDESTRIANS SHALL BE PROTECTED DURING CONSTRUCTION, REMODELING AND DEMOLITION ACTIVITIES.

SITE PLAN SCALE: 1" = 40'-0" (1)

VERTREES A&E
Architectural & Engineering Services
532 East Lambert Road
Brea, CA 92821
tel. 714.255.9645
www.vertreesae.com

△ DATE XXXX

Contractor:

Proposed:
PROJECT NAME

For:
CLIENT/OWNER NAME

CLIENT ADDRESS

Project Address:
PROJECT ADDRESS

SITE PLAN

Plot Date
01/18/2023

VAE Project No.
000

A1.1

Appendix B

Traffic Counts

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, March 07, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	IN 1	2	3	4	5	6	TOTAL	PM Time	IN 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	0	0	0	2	0	0	2
0:15	0	0	0	0	0	0	0	12:15	0	0	0	0	0	0	0
0:30	0	0	0	0	0	0	0	12:30	0	0	0	1	0	0	1
0:45	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	13:00	1	0	0	1	0	0	2
1:15	0	0	0	0	0	0	0	13:15	1	0	0	2	0	0	3
1:30	0	0	0	0	0	0	0	13:30	1	0	0	0	0	0	1
1:45	0	0	0	0	0	0	0	13:45	2	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	14:00	2	0	0	0	0	0	2
2:15	0	0	0	0	0	0	0	14:15	3	0	0	0	0	0	3
2:30	0	0	0	0	0	0	0	14:30	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	14:45	1	1	0	0	0	0	2
3:00	0	0	0	0	0	0	0	15:00	2	0	0	0	0	0	2
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	1	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	0	0	0	0	0	0
4:30	11	0	0	0	0	0	11	16:30	0	0	0	0	0	0	0
4:45	6	0	0	2	0	0	8	16:45	0	0	0	0	0	0	0
5:00	1	0	0	4	0	0	5	17:00	0	0	0	0	0	0	0
5:15	0	0	0	0	0	0	0	17:15	0	0	0	1	0	0	1
5:30	0	0	0	2	0	0	2	17:30	0	0	0	1	0	0	1
5:45	0	0	0	1	0	0	1	17:45	0	0	0	0	0	0	0
6:00	1	0	0	2	0	0	3	18:00	0	0	0	0	0	0	0
6:15	1	1	0	1	0	0	3	18:15	0	0	0	1	0	0	1
6:30	0	0	0	0	0	0	0	18:30	0	0	0	0	0	0	0
6:45	1	0	0	0	0	0	1	18:45	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	19:00	1	0	0	1	0	0	2
7:15	0	0	0	2	0	0	2	19:15	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	19:30	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	19:45	0	0	0	0	0	0	0
8:00	0	1	0	0	0	0	1	20:00	1	0	0	0	0	0	1
8:15	0	0	0	0	0	0	0	20:15	1	0	0	0	0	0	1
8:30	1	0	1	0	0	0	2	20:30	0	0	0	0	0	0	0
8:45	0	1	0	3	0	0	4	20:45	0	0	0	0	0	0	0
9:00	0	1	0	0	0	0	1	21:00	0	0	0	1	0	0	1
9:15	1	0	0	0	0	0	1	21:15	1	0	0	0	0	0	1
9:30	1	0	0	0	0	0	1	21:30	0	0	0	0	0	0	0
9:45	2	1	0	0	0	0	3	21:45	0	0	0	0	0	0	0
10:00	2	0	0	1	0	0	3	22:00	0	0	0	0	0	0	0
10:15	1	1	0	1	0	0	3	22:15	0	0	0	0	0	0	0
10:30	1	0	0	1	0	0	2	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	1	0	0	0	0	0	1	23:00	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	23:15	0	0	0	0	0	0	0
11:30	3	0	0	0	0	0	3	23:30	0	0	0	0	0	0	0
11:45	0	0	0	1	0	0	1	23:45	0	0	0	0	0	0	0
TOTAL	37	6	1	21	0	0	65	**TOTAL**	18	1	0	11	0	0	30

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	27

AM PEAK HOUR	1:30 PM
AM PEAK VOLUME	8

CLASS 1	PASSENGER VEHICLES	**TOTAL: AM+PM**	55	7	1	32	0	0	95
CLASS 2	2-AXLE TRUCKS	**% OF TOTAL**	57.9%	7.4%	1.1%	33.7%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	**TOTAL: ALL**	111	16	2	65	0	0	194
CLASS 6	Buses	**% OF TOTAL**	57.2%	8.2%	1.0%	33.5%	0.0%	0.0%	100.0%

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, March 07, 2023
JOB #: SC3845
CITY: Fontana
LOCATION: CLASS1 DWY1 north of Jurupa.

AM TIME	OUT 1	2	3	4	5	6	TOTAL	PM Time	OUT 1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	1	0	0	0	0	0	1
0:15	0	0	0	0	0	0	0	12:15	0	1	0	0	0	0	1
0:30	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0
0:45	1	0	0	0	0	0	1	12:45	1	0	0	1	0	0	2
1:00	0	0	0	0	0	0	0	13:00	1	0	0	1	0	0	2
1:15	4	0	0	0	0	0	4	13:15	0	0	0	2	0	0	2
1:30	2	0	0	0	0	0	2	13:30	0	0	0	0	0	0	0
1:45	4	0	0	0	0	0	4	13:45	0	0	0	1	0	0	1
2:00	0	0	0	0	0	0	0	14:00	15	0	0	1	0	0	16
2:15	0	0	0	0	0	0	0	14:15	1	0	0	1	0	0	2
2:30	0	0	0	0	0	0	0	14:30	0	1	0	0	0	0	1
2:45	0	0	0	0	0	0	0	14:45	1	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	15:00	2	1	0	0	0	0	3
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	16:15	0	0	0	0	0	0	0
4:30	0	0	0	0	0	0	0	16:30	2	0	0	0	0	0	2
4:45	1	0	0	0	0	0	1	16:45	0	0	0	0	0	0	0
5:00	0	0	0	1	0	0	1	17:00	0	0	0	0	0	0	0
5:15	0	0	0	2	0	0	2	17:15	0	0	0	0	0	0	0
5:30	0	0	1	4	0	0	5	17:30	0	0	0	1	0	0	1
5:45	1	0	0	0	0	0	1	17:45	1	0	0	0	0	0	1
6:00	0	0	0	1	0	0	1	18:00	0	1	0	1	0	0	2
6:15	0	0	0	0	0	0	0	18:15	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	18:30	0	0	0	0	0	0	0
6:45	0	0	0	4	0	0	4	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	0	0	0	1	0	0	1
7:15	1	0	0	0	0	0	1	19:15	0	0	0	1	0	0	1
7:30	0	0	0	0	0	0	0	19:30	0	0	0	0	0	0	0
7:45	0	0	0	2	0	0	2	19:45	0	0	0	0	0	0	0
8:00	0	1	0	0	0	0	1	20:00	2	0	0	0	0	0	2
8:15	1	0	0	0	0	0	1	20:15	0	0	0	0	0	0	0
8:30	0	0	0	1	0	0	1	20:30	0	0	0	0	0	0	0
8:45	1	1	0	0	0	0	2	20:45	0	0	0	0	0	0	0
9:00	0	0	0	1	0	0	1	21:00	0	0	0	0	0	0	0
9:15	1	1	0	1	0	0	3	21:15	0	0	0	1	0	0	1
9:30	2	0	0	0	0	0	2	21:30	0	0	0	0	0	0	0
9:45	0	1	0	1	0	0	2	21:45	0	0	0	0	0	0	0
10:00	0	1	0	0	0	0	1	22:00	0	0	0	0	0	0	0
10:15	1	0	0	0	0	0	1	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	1	0	0	1	23:00	1	0	0	0	0	0	1
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	2	0	0	0	0	0	2	23:30	0	0	0	0	0	0	0
11:45	1	0	0	1	0	0	2	23:45	3	0	0	0	0	0	3
TOTAL	25	5	1	21	0	0	52	TOTAL	31	4	0	12	0	0	47
				AM PEAK HOUR			1:15 AM					AM PEAK HOUR			2:00 PM
				AM PEAK VOLUME			10					AM PEAK VOLUME			20

TOTAL: AM+PM	56	9	1	33	0	0	99
% OF TOTAL	56.6%	9.1%	1.0%	33.3%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, March 07, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	COMBINED 1	2	3	4	5	6	TOTAL	PM Time	COMBINED 1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	1	0	0	2	0	0	3
0:15	0	0	0	0	0	0	0	12:15	0	1	0	0	0	0	1
0:30	0	0	0	0	0	0	0	12:30	0	0	0	1	0	0	1
0:45	1	0	0	0	0	0	1	12:45	1	0	0	1	0	0	2
1:00	0	0	0	0	0	0	0	13:00	2	0	0	2	0	0	4
1:15	4	0	0	0	0	0	4	13:15	1	0	0	4	0	0	5
1:30	2	0	0	0	0	0	2	13:30	1	0	0	0	0	0	1
1:45	4	0	0	0	0	0	4	13:45	2	0	0	1	0	0	3
2:00	0	0	0	0	0	0	0	14:00	17	0	0	1	0	0	18
2:15	0	0	0	0	0	0	0	14:15	4	0	0	1	0	0	5
2:30	0	0	0	0	0	0	0	14:30	0	1	0	0	0	0	1
2:45	0	0	0	0	0	0	0	14:45	2	1	0	0	0	0	3
3:00	0	0	0	0	0	0	0	15:00	4	1	0	0	0	0	5
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	1	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	0	0	0	0	0	0
4:30	11	0	0	0	0	0	11	16:30	2	0	0	0	0	0	2
4:45	7	0	0	2	0	0	9	16:45	0	0	0	0	0	0	0
5:00	1	0	0	5	0	0	6	17:00	0	0	0	0	0	0	0
5:15	0	0	0	2	0	0	2	17:15	0	0	0	1	0	0	1
5:30	0	0	1	6	0	0	7	17:30	0	0	0	2	0	0	2
5:45	1	0	0	1	0	0	2	17:45	1	0	0	0	0	0	1
6:00	1	0	0	3	0	0	4	18:00	0	1	0	1	0	0	2
6:15	1	1	0	1	0	0	3	18:15	0	0	0	1	0	0	1
6:30	0	0	0	0	0	0	0	18:30	0	0	0	0	0	0	0
6:45	1	0	0	4	0	0	5	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	1	0	0	2	0	0	3
7:15	1	0	0	2	0	0	3	19:15	0	0	0	1	0	0	1
7:30	0	0	0	0	0	0	0	19:30	0	0	0	0	0	0	0
7:45	0	0	0	2	0	0	2	19:45	0	0	0	0	0	0	0
8:00	0	2	0	0	0	0	2	20:00	3	0	0	0	0	0	3
8:15	1	0	0	0	0	0	1	20:15	1	0	0	0	0	0	1
8:30	1	0	1	1	0	0	3	20:30	0	0	0	0	0	0	0
8:45	1	2	0	3	0	0	6	20:45	0	0	0	0	0	0	0
9:00	0	1	0	1	0	0	2	21:00	0	0	0	1	0	0	1
9:15	2	1	0	1	0	0	4	21:15	1	0	0	1	0	0	2
9:30	3	0	0	0	0	0	3	21:30	0	0	0	0	0	0	0
9:45	2	2	0	1	0	0	5	21:45	0	0	0	0	0	0	0
10:00	2	1	0	1	0	0	4	22:00	0	0	0	0	0	0	0
10:15	2	1	0	1	0	0	4	22:15	0	0	0	0	0	0	0
10:30	1	0	0	1	0	0	2	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	1	0	0	1	0	0	2	23:00	1	0	0	0	0	0	1
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	5	0	0	0	0	0	5	23:30	0	0	0	0	0	0	0
11:45	1	0	0	2	0	0	3	23:45	3	0	0	0	0	0	3
TOTAL	62	11	2	42	0	0	117	**TOTAL**	49	5	0	23	0	0	77

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	29

AM PEAK HOUR	2:00 PM
AM PEAK VOLUME	27

TOTAL: AM+PM	111	16	2	65	0	0	194
% OF TOTAL	57.2%	8.2%	1.0%	33.5%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	IN 1	2	3	4	5	6	TOTAL	PM Time	IN 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	1	0	0	1	0	0	2
0:15	0	0	0	0	0	0	0	12:15	0	0	0	1	0	0	1
0:30	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0
0:45	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	13:00	0	0	0	1	0	0	1
1:15	0	0	0	0	0	0	0	13:15	0	0	0	1	0	0	1
1:30	0	0	0	0	0	0	0	13:30	0	0	0	1	0	0	1
1:45	0	0	0	0	0	0	0	13:45	1	0	0	1	0	0	2
2:00	0	0	0	0	0	0	0	14:00	2	0	0	0	0	0	2
2:15	0	0	0	0	0	0	0	14:15	2	0	0	0	0	0	2
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	1	0	0	0	0	3
3:00	0	0	0	0	0	0	0	15:00	0	0	0	0	0	0	0
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	5	0	0	0	0	0	5	16:15	0	0	0	0	0	0	0
4:30	10	0	0	0	0	0	10	16:30	0	0	0	1	0	0	1
4:45	5	0	0	2	0	0	7	16:45	0	0	0	0	0	0	0
5:00	0	0	0	3	0	0	3	17:00	0	0	0	0	0	0	0
5:15	1	0	0	2	0	0	3	17:15	0	1	0	0	0	0	1
5:30	0	0	0	1	0	0	1	17:30	0	0	0	0	0	0	0
5:45	0	0	0	2	0	0	2	17:45	0	0	0	1	0	0	1
6:00	0	0	0	0	0	0	0	18:00	0	0	0	1	0	0	1
6:15	1	0	0	0	0	0	1	18:15	0	0	0	0	0	0	0
6:30	0	0	0	1	0	0	1	18:30	0	0	0	2	0	0	2
6:45	1	1	1	0	0	0	3	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	0	0	0	1	0	0	1
7:15	0	1	0	2	0	0	3	19:15	0	0	0	0	0	0	0
7:30	1	0	0	0	0	0	1	19:30	0	0	0	0	0	0	0
7:45	1	0	0	0	0	0	1	19:45	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	20:00	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	20:15	2	0	0	0	0	0	2
8:30	0	0	0	0	0	0	0	20:30	0	0	0	0	0	0	0
8:45	0	0	1	1	0	0	2	20:45	0	0	0	0	0	0	0
9:00	1	0	0	2	0	0	3	21:00	0	0	0	0	0	0	0
9:15	0	0	0	1	0	0	1	21:15	0	0	0	0	0	0	0
9:30	0	1	0	1	0	0	2	21:30	0	0	0	0	0	0	0
9:45	2	0	0	2	0	0	4	21:45	0	0	0	0	0	0	0
10:00	1	1	0	0	0	0	2	22:00	0	0	0	0	0	0	0
10:15	1	0	0	0	0	0	1	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	1	0	2	0	0	3	22:45	0	0	0	0	0	0	0
11:00	0	0	0	1	0	0	1	23:00	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	23:15	0	0	0	0	0	0	0
11:30	0	0	0	4	0	0	4	23:30	0	0	0	0	0	0	0
11:45	1	3	0	1	0	0	5	23:45	0	0	0	0	0	0	0
TOTAL	31	8	2	29	0	0	70	TOTAL	14	2	0	12	0	0	28

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	25

AM PEAK HOUR	2:00 PM
AM PEAK VOLUME	11

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	45	10	2	41	0	0	98
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	45.9%	10.2%	2.0%	41.8%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	89	24	3	82	0	0	198
CLASS 6	Buses	% OF TOTAL	44.9%	12.1%	1.5%	41.4%	0.0%	0.0%	100.0%

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3845
CITY: Fontana
LOCATION: CLASS1 DWY1 north of Jurupa.

AM	OUT							PM	OUT						
TIME	1	2	3	4	5	6	TOTAL	Time	1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	1	0	0	0	0	0	1
0:15	2	0	0	0	0	0	2	12:15	0	0	0	4	0	0	4
0:30	3	0	0	0	0	0	3	12:30	0	0	0	1	0	0	1
0:45	0	0	0	0	0	0	0	12:45	0	0	0	2	0	0	2
1:00	0	0	0	0	0	0	0	13:00	0	0	0	0	0	0	0
1:15	0	0	0	0	0	0	0	13:15	0	1	0	1	0	0	2
1:30	0	0	0	0	0	0	0	13:30	10	0	0	0	0	0	10
1:45	0	0	0	0	0	0	0	13:45	6	0	0	1	0	0	7
2:00	0	0	0	0	0	0	0	14:00	1	0	0	0	0	0	1
2:15	0	0	0	0	0	0	0	14:15	1	0	0	0	0	0	1
2:30	0	0	0	0	0	0	0	14:30	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	14:45	0	1	0	0	0	0	1
3:00	0	0	0	0	0	0	0	15:00	0	1	0	0	0	0	1
3:15	0	0	0	0	0	0	0	15:15	1	1	0	0	0	0	2
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	16:15	1	0	0	0	0	0	1
4:30	0	0	0	0	0	0	0	16:30	3	0	0	0	0	0	3
4:45	0	0	0	0	0	0	0	16:45	0	0	0	0	0	0	0
5:00	0	0	0	1	0	0	1	17:00	0	0	0	0	0	0	0
5:15	0	0	0	3	0	0	3	17:15	1	1	0	0	0	0	2
5:30	0	0	0	2	0	0	2	17:30	0	0	0	0	0	0	0
5:45	1	0	0	0	0	0	1	17:45	0	0	0	1	0	0	1
6:00	0	0	0	1	0	0	1	18:00	0	0	0	0	0	0	0
6:15	0	0	0	4	0	0	4	18:15	0	0	0	1	0	0	1
6:30	0	0	0	0	0	0	0	18:30	0	0	0	1	0	0	1
6:45	0	0	0	0	0	0	0	18:45	0	0	0	1	0	0	1
7:00	0	0	0	1	0	0	1	19:00	0	0	0	0	0	0	0
7:15	0	1	0	1	0	0	2	19:15	0	0	0	0	0	0	0
7:30	0	1	0	2	0	0	3	19:30	0	0	0	0	0	0	0
7:45	0	0	0	1	0	0	1	19:45	0	0	0	2	0	0	2
8:00	0	0	0	0	0	0	0	20:00	0	0	0	0	0	0	0
8:15	1	0	0	0	0	0	1	20:15	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	20:30	0	0	0	0	0	0	0
8:45	0	0	0	1	0	0	1	20:45	0	0	0	0	0	0	0
9:00	1	1	1	0	0	0	3	21:00	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	21:15	0	0	0	0	0	0	0
9:30	1	0	0	2	0	0	3	21:30	0	0	0	0	0	0	0
9:45	0	1	0	1	0	0	2	21:45	0	0	0	0	0	0	0
10:00	1	2	0	2	0	0	5	22:00	0	0	0	0	0	0	0
10:15	0	1	0	0	0	0	1	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	1	0	0	1	23:00	1	0	0	0	0	0	1
11:15	0	0	0	3	0	0	3	23:15	0	0	0	0	0	0	0
11:30	2	0	0	0	0	0	2	23:30	4	0	0	0	0	0	4
11:45	0	2	0	0	0	0	2	23:45	1	0	0	0	0	0	1
TOTAL	13	9	1	26	0	0	49	TOTAL	31	5	0	15	0	0	51
				AM PEAK HOUR			9:30 AM					AM PEAK HOUR			1:15 PM
				AM PEAK VOLUME			11					AM PEAK VOLUME			20

TOTAL: AM+PM	44	14	1	41	0	0	100
% OF TOTAL	44.0%	14.0%	1.0%	41.0%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM	COMBINED							PM	COMBINED						
TIME	1	2	3	4	5	6	TOTAL	Time	1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	2	0	0	1	0	0	3
0:15	2	0	0	0	0	0	2	12:15	0	0	0	5	0	0	5
0:30	3	0	0	0	0	0	3	12:30	0	0	0	1	0	0	1
0:45	0	0	0	0	0	0	0	12:45	0	0	0	2	0	0	2
1:00	0	0	0	0	0	0	0	13:00	0	0	0	1	0	0	1
1:15	0	0	0	0	0	0	0	13:15	0	1	0	2	0	0	3
1:30	0	0	0	0	0	0	0	13:30	10	0	0	1	0	0	11
1:45	0	0	0	0	0	0	0	13:45	7	0	0	2	0	0	9
2:00	0	0	0	0	0	0	0	14:00	3	0	0	0	0	0	3
2:15	0	0	0	0	0	0	0	14:15	3	0	0	0	0	0	3
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	2	0	0	0	0	4
3:00	0	0	0	0	0	0	0	15:00	0	1	0	0	0	0	1
3:15	0	0	0	0	0	0	0	15:15	1	1	0	0	0	0	2
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	5	0	0	0	0	0	5	16:15	1	0	0	0	0	0	1
4:30	10	0	0	0	0	0	10	16:30	3	0	0	1	0	0	4
4:45	5	0	0	2	0	0	7	16:45	0	0	0	0	0	0	0
5:00	0	0	0	4	0	0	4	17:00	0	0	0	0	0	0	0
5:15	1	0	0	5	0	0	6	17:15	1	2	0	0	0	0	3
5:30	0	0	0	3	0	0	3	17:30	0	0	0	0	0	0	0
5:45	1	0	0	2	0	0	3	17:45	0	0	0	2	0	0	2
6:00	0	0	0	1	0	0	1	18:00	0	0	0	1	0	0	1
6:15	1	0	0	4	0	0	5	18:15	0	0	0	1	0	0	1
6:30	0	0	0	1	0	0	1	18:30	0	0	0	3	0	0	3
6:45	1	1	1	0	0	0	3	18:45	0	0	0	1	0	0	1
7:00	0	0	0	2	0	0	2	19:00	0	0	0	1	0	0	1
7:15	0	2	0	3	0	0	5	19:15	0	0	0	0	0	0	0
7:30	1	1	0	2	0	0	4	19:30	0	0	0	0	0	0	0
7:45	1	0	0	1	0	0	2	19:45	0	0	0	2	0	0	2
8:00	0	0	0	0	0	0	0	20:00	0	0	0	0	0	0	0
8:15	1	0	0	0	0	0	1	20:15	2	0	0	0	0	0	2
8:30	0	0	0	0	0	0	0	20:30	0	0	0	0	0	0	0
8:45	0	0	1	2	0	0	3	20:45	0	0	0	0	0	0	0
9:00	2	1	1	2	0	0	6	21:00	0	0	0	0	0	0	0
9:15	0	0	0	1	0	0	1	21:15	0	0	0	0	0	0	0
9:30	1	1	0	3	0	0	5	21:30	0	0	0	0	0	0	0
9:45	2	1	0	3	0	0	6	21:45	0	0	0	0	0	0	0
10:00	2	3	0	2	0	0	7	22:00	0	0	0	0	0	0	0
10:15	1	1	0	0	0	0	2	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	1	0	2	0	0	3	22:45	0	0	0	0	0	0	0
11:00	0	0	0	2	0	0	2	23:00	1	0	0	0	0	0	1
11:15	0	0	0	3	0	0	3	23:15	0	0	0	0	0	0	0
11:30	2	0	0	4	0	0	6	23:30	4	0	0	0	0	0	4
11:45	1	5	0	1	0	0	7	23:45	1	0	0	0	0	0	1
TOTAL	44	17	3	55	0	0	119	TOTAL	45	7	0	27	0	0	79

AM PEAK HOUR	4:30 AM
AM PEAK VOLUME	27

AM PEAK HOUR	1:30 PM
AM PEAK VOLUME	26

TOTAL: AM+PM	89	24	3	82	0	0	198
% OF TOTAL	44.9%	12.1%	1.5%	41.4%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	IN 1	2	3	4	5	6	TOTAL	PM Time	IN 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	0	0	0	0	0	0	0
0:15	0	0	0	0	0	0	0	12:15	0	0	1	1	0	0	2
0:30	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0
0:45	0	0	0	0	0	0	0	12:45	2	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	13:00	0	0	0	1	0	0	1
1:15	0	0	0	0	0	0	0	13:15	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	13:30	2	0	0	0	0	0	2
1:45	0	0	0	0	0	0	0	13:45	0	1	1	0	0	0	2
2:00	0	0	0	0	0	0	0	14:00	2	0	0	0	0	0	2
2:15	0	0	0	0	0	0	0	14:15	0	0	0	1	0	0	1
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	0	0	0	0	0	2
3:00	0	0	0	0	0	0	0	15:00	2	0	0	0	0	0	2
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	1	0	0	0	0	1
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	0	0	0	0	0	0
4:30	8	0	0	1	0	0	9	16:30	0	0	0	0	0	0	0
4:45	6	0	0	1	0	0	7	16:45	0	1	0	0	0	0	1
5:00	1	0	0	2	0	0	3	17:00	0	0	0	0	0	0	0
5:15	1	0	0	0	0	0	1	17:15	0	0	0	0	0	0	0
5:30	0	0	0	1	0	0	1	17:30	0	0	0	1	0	0	1
5:45	0	0	0	1	0	0	1	17:45	0	0	0	1	0	0	1
6:00	0	0	0	3	0	0	3	18:00	0	0	0	0	0	0	0
6:15	0	0	0	1	0	0	1	18:15	0	0	0	0	0	0	0
6:30	0	0	0	1	0	0	1	18:30	0	0	0	0	0	0	0
6:45	0	1	1	1	0	0	3	18:45	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	19:00	0	0	0	1	0	0	1
7:15	0	0	0	0	0	0	0	19:15	0	0	0	0	0	0	0
7:30	0	1	0	0	0	0	1	19:30	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	19:45	0	0	0	0	0	0	0
8:00	1	1	0	1	0	0	3	20:00	0	0	0	0	0	0	0
8:15	0	0	0	1	0	0	1	20:15	2	0	0	0	0	0	2
8:30	3	0	0	3	0	0	6	20:30	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	20:45	0	0	0	0	0	0	0
9:00	0	0	0	1	0	0	1	21:00	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	21:15	0	0	0	0	0	0	0
9:30	0	1	0	1	0	0	2	21:30	0	0	0	0	0	0	0
9:45	1	0	0	0	0	0	1	21:45	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	22:00	0	0	0	0	0	0	0
10:15	1	0	0	1	0	0	2	22:15	0	0	0	0	0	0	0
10:30	1	0	0	0	0	0	1	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	23:00	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	23:15	0	0	0	0	0	0	0
11:30	1	0	0	1	0	0	2	23:30	0	0	0	0	0	0	0
11:45	0	0	0	1	0	0	1	23:45	0	0	0	0	0	0	0
TOTAL	27	4	1	22	0	0	54	TOTAL	16	3	2	6	0	0	27

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	22

AM PEAK HOUR	2:15 PM
AM PEAK VOLUME	9

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	43	7	3	28	0	0	81
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	53.1%	8.6%	3.7%	34.6%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	94	16	6	57	0	0	173
CLASS 6	Buses	% OF TOTAL	54.3%	9.2%	3.5%	32.9%	0.0%	0.0%	100.0%

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3845
CITY: Fontana
LOCATION: CLASS1 DWY1 north of Jurupa.

AM TIME	OUT 1	2	3	4	5	6	TOTAL	PM Time	OUT 1	2	3	4	5	6	TOTAL
0:00	2	0	0	0	0	0	2	12:00	0	0	0	0	0	0	0
0:15	3	0	0	0	0	0	3	12:15	2	0	1	0	0	0	3
0:30	0	0	0	0	0	0	0	12:30	1	0	0	1	0	0	2
0:45	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	13:00	2	0	0	0	0	0	2
1:15	0	0	0	0	0	0	0	13:15	0	0	0	1	0	0	1
1:30	0	0	0	0	0	0	0	13:30	11	0	0	0	0	0	11
1:45	0	0	0	0	0	0	0	13:45	2	1	0	1	0	0	4
2:00	0	0	0	0	0	0	0	14:00	0	0	1	0	0	0	1
2:15	0	0	0	0	0	0	0	14:15	0	0	0	0	0	0	0
2:30	0	0	0	0	0	0	0	14:30	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	14:45	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	15:00	0	1	0	0	0	0	1
3:15	0	0	0	0	0	0	0	15:15	0	1	0	0	0	0	1
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	1	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	16:15	0	1	0	0	0	0	1
4:30	1	0	0	0	0	0	1	16:30	1	0	0	0	0	0	1
4:45	0	0	0	0	0	0	0	16:45	1	1	0	0	0	0	2
5:00	0	0	0	0	0	0	0	17:00	0	0	0	0	0	0	0
5:15	0	0	0	1	0	0	1	17:15	0	0	0	0	0	0	0
5:30	0	0	0	3	0	0	3	17:30	0	0	0	0	0	0	0
5:45	0	0	0	1	0	0	1	17:45	0	0	0	0	0	0	0
6:00	0	0	0	0	0	0	0	18:00	0	0	0	1	0	0	1
6:15	0	0	0	0	0	0	0	18:15	0	0	0	1	0	0	1
6:30	0	0	0	1	0	0	1	18:30	0	0	0	0	0	0	0
6:45	0	0	1	2	0	0	3	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	1	0	0	0	0	0	1
7:15	0	0	0	4	0	0	4	19:15	0	0	0	1	0	0	1
7:30	0	0	0	0	0	0	0	19:30	1	0	0	0	0	0	1
7:45	0	0	0	0	0	0	0	19:45	1	0	0	0	0	0	1
8:00	0	0	0	1	0	0	1	20:00	1	0	0	0	0	0	1
8:15	3	1	0	0	0	0	4	20:15	0	0	0	0	0	0	0
8:30	1	0	0	0	0	0	1	20:30	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	1	20:45	1	0	0	0	0	0	1
9:00	0	1	0	2	0	0	3	21:00	0	0	0	0	0	0	0
9:15	0	0	0	2	0	0	2	21:15	0	0	0	0	0	0	0
9:30	0	0	0	2	0	0	2	21:30	0	0	0	0	0	0	0
9:45	2	0	0	0	0	0	2	21:45	0	0	0	0	0	0	0
10:00	0	1	0	0	0	0	1	22:00	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	22:15	0	0	0	0	0	0	0
10:30	1	0	0	1	0	0	2	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	23:00	3	0	0	0	0	0	3
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	0	1	0	0	0	0	1	23:30	5	0	0	0	0	0	5
11:45	0	0	0	1	0	0	1	23:45	3	0	0	0	0	0	3
TOTAL	15	4	1	22	0	0	42	TOTAL	36	5	2	7	0	0	50
				AM PEAK HOUR			9:00 AM						AM PEAK HOUR		1:00 PM
				AM PEAK VOLUME			9						AM PEAK VOLUME		18

TOTAL: AM+PM	51	9	3	29	0	0	92
% OF TOTAL	55.4%	9.8%	3.3%	31.5%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	COMBINED 1	2	3	4	5	6	TOTAL	PM Time	COMBINED 1	2	3	4	5	6	TOTAL
0:00	2	0	0	0	0	0	2	12:00	0	0	0	0	0	0	0
0:15	3	0	0	0	0	0	3	12:15	2	0	2	1	0	0	5
0:30	0	0	0	0	0	0	0	12:30	1	0	0	1	0	0	2
0:45	0	0	0	0	0	0	0	12:45	2	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	13:00	2	0	0	1	0	0	3
1:15	0	0	0	0	0	0	0	13:15	0	0	0	1	0	0	1
1:30	0	0	0	0	0	0	0	13:30	13	0	0	0	0	0	13
1:45	0	0	0	0	0	0	0	13:45	2	2	1	1	0	0	6
2:00	0	0	0	0	0	0	0	14:00	2	0	1	0	0	0	3
2:15	0	0	0	0	0	0	0	14:15	0	0	0	1	0	0	1
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	0	0	0	0	0	2
3:00	0	0	0	0	0	0	0	15:00	2	1	0	0	0	0	3
3:15	0	0	0	0	0	0	0	15:15	0	1	0	0	0	0	1
3:30	0	0	0	0	0	0	0	15:30	0	1	0	0	0	0	1
3:45	0	0	0	0	0	0	0	15:45	0	0	0	1	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	1	0	0	0	0	1
4:30	9	0	0	1	0	0	10	16:30	1	0	0	0	0	0	1
4:45	6	0	0	1	0	0	7	16:45	1	2	0	0	0	0	3
5:00	1	0	0	2	0	0	3	17:00	0	0	0	0	0	0	0
5:15	1	0	0	1	0	0	2	17:15	0	0	0	0	0	0	0
5:30	0	0	0	4	0	0	4	17:30	0	0	0	1	0	0	1
5:45	0	0	0	2	0	0	2	17:45	0	0	0	1	0	0	1
6:00	0	0	0	3	0	0	3	18:00	0	0	0	1	0	0	1
6:15	0	0	0	1	0	0	1	18:15	0	0	0	1	0	0	1
6:30	0	0	0	2	0	0	2	18:30	0	0	0	0	0	0	0
6:45	0	1	2	3	0	0	6	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	1	0	0	1	0	0	2
7:15	0	0	0	4	0	0	4	19:15	0	0	0	1	0	0	1
7:30	0	1	0	0	0	0	1	19:30	1	0	0	0	0	0	1
7:45	0	0	0	0	0	0	0	19:45	1	0	0	0	0	0	1
8:00	1	1	0	2	0	0	4	20:00	1	0	0	0	0	0	1
8:15	3	1	0	1	0	0	5	20:15	2	0	0	0	0	0	2
8:30	4	0	0	3	0	0	7	20:30	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	1	20:45	1	0	0	0	0	0	1
9:00	0	1	0	3	0	0	4	21:00	0	0	0	0	0	0	0
9:15	0	0	0	2	0	0	2	21:15	0	0	0	0	0	0	0
9:30	0	1	0	3	0	0	4	21:30	0	0	0	0	0	0	0
9:45	3	0	0	0	0	0	3	21:45	0	0	0	0	0	0	0
10:00	0	1	0	0	0	0	1	22:00	0	0	0	0	0	0	0
10:15	1	0	0	1	0	0	2	22:15	0	0	0	0	0	0	0
10:30	2	0	0	1	0	0	3	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	23:00	3	0	0	0	0	0	3
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	1	1	0	1	0	0	3	23:30	5	0	0	0	0	0	5
11:45	0	0	0	2	0	0	2	23:45	3	0	0	0	0	0	3
TOTAL	42	8	2	44	0	0	96	TOTAL	52	8	4	13	0	0	77

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	23

AM PEAK HOUR	1:30 PM
AM PEAK VOLUME	23

TOTAL: AM+PM	94	16	6	57	0	0	173
% OF TOTAL	54.3%	9.2%	3.5%	32.9%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

MEMORANDUM

TO: Bryan Crawford, Senior Transportation Planner, Ganddini Group, Inc.
Kevin Sin, City of Banning

FROM: Joanna Rembis, ***Engineering Resources of Southern California, Inc.***
Stephen Manganiello, ***STC Traffic, Inc.***

DATE: 05/25/2023

SUBJECT: **18014001 - 213 - Banning Brown Strauss Industrial - TIA Scoping Agreement - PC1**

We have completed the review of the Traffic Impact Analysis (TIA) Scoping Agreement dated April 3, 2023, for the above-referenced project and the following comments are the result of our review.

General Comments

1. Please complete and attach a TIA Scoping Form per Appendix A of the City of Banning Traffic Impact Analysis Guidelines for Local Transportation Analysis and Vehicle Miles Travelled Analysis (October 2021).

Site Access, Safety and Other Analyses

2. Per Section 3.7 of the City's guidelines, please include the following for evaluation in the traffic impact analysis:
    a. Overlay project site plan with truck turning templates to confirm ingress and egress at all project driveways.
    b. Evaluate lane configurations, traffic control and potential turn restrictions at all project driveways.
    c. Analyze left turn storage, access control and spacing between driveways to determine whether number of driveways need to be consolidated.
    d. Analyze queuing at gates to confirm whether sufficient storage is provided on-site to prevent spillback onto adjacent roadways.

If you have any questions on these comments please contact Stephen Manganiello, Contract Traffic Engineer, at stephen.manganiello@stctraffic.com.

APPENDIX C

VOLUME COUNT WORKSHEETS

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
Tue, Aug 15, 23	NORTH & SOUTH:	22nd	LOCATION #:	1
	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

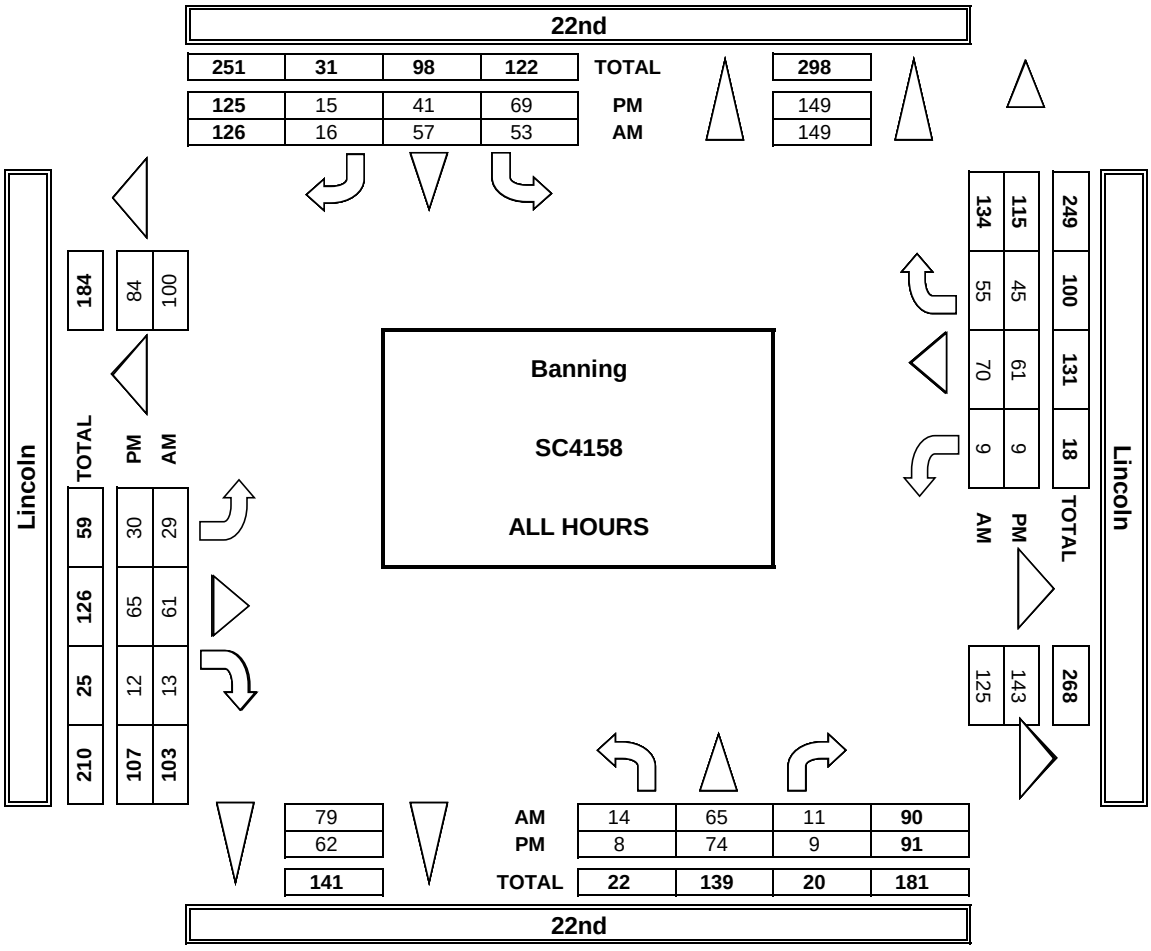
NOTES:

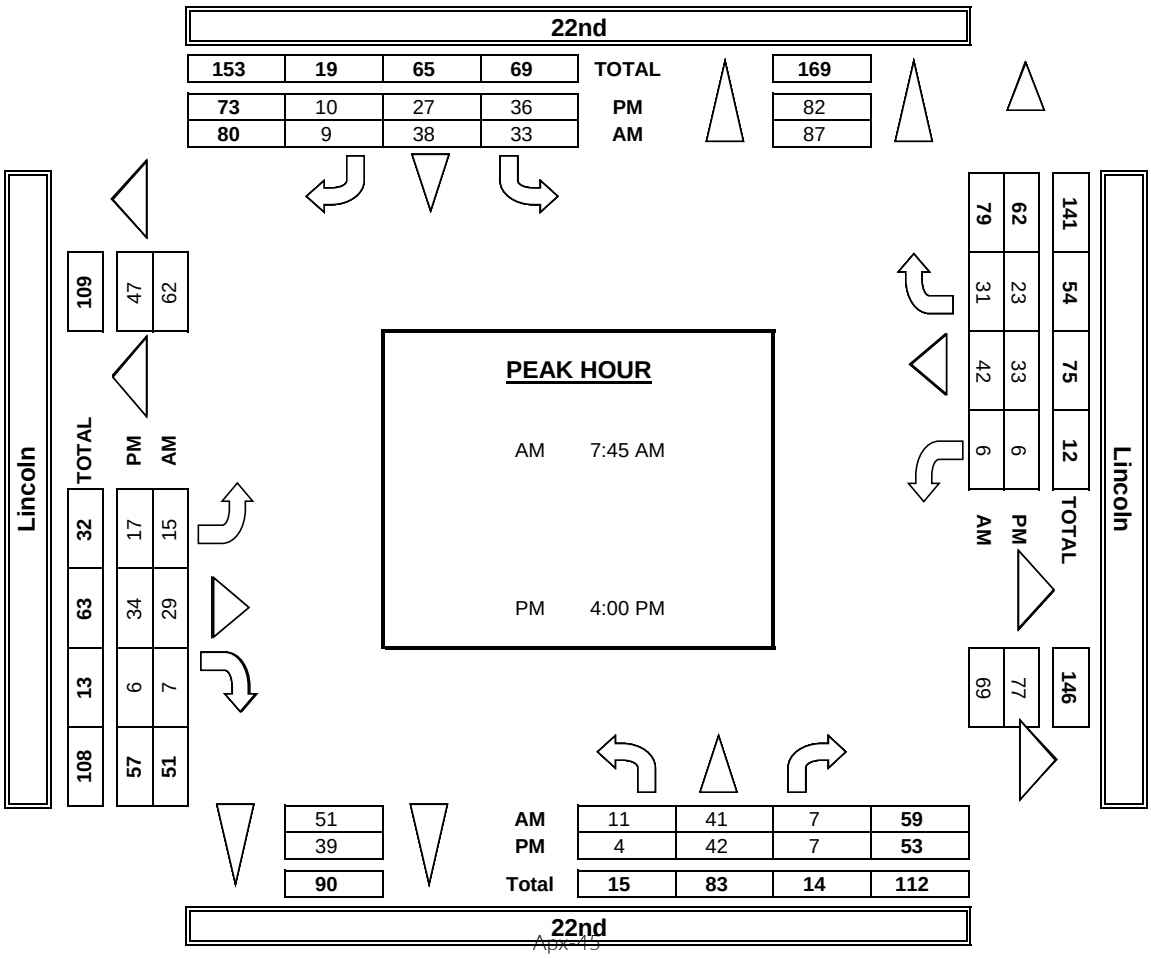
AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	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	10	0	7	5	3	3	4	1	0	5	6	44	0	0	0	0	0
	7:15 AM	0	4	1	3	3	1	3	13	1	1	5	8	43	0	0	0	0	0
	7:30 AM	2	4	3	4	4	1	0	9	2	1	8	3	41	0	0	0	0	0
	7:45 AM	1	9	2	7	6	2	5	6	2	0	14	7	61	0	0	0	0	0
	8:00 AM	4	4	0	11	12	2	5	7	2	4	4	9	64	0	0	0	0	0
	8:15 AM	2	19	4	6	16	2	3	10	3	1	13	7	86	0	0	0	0	0
	8:30 AM	4	9	1	9	4	3	2	6	0	1	11	8	58	0	0	0	0	0
	8:45 AM	1	6	0	6	7	2	8	6	2	1	10	7	56	0	0	0	0	0
	VOLUMES	14	65	11	53	57	16	29	61	13	9	70	55	453	0	0	0	0	0
	APPROACH %	16%	72%	12%	42%	45%	13%	28%	59%	13%	7%	52%	41%						
	APP/DEPART	90	/	149	126	/	79	103	/	125	134	/	100	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	11	41	7	33	38	9	15	29	7	6	42	31	269					
	APPROACH %	19%	69%	12%	41%	48%	11%	29%	57%	14%	8%	53%	39%						
	PEAK HR FACTOR		0.590			0.800			0.797			0.940		0.782					
	APP/DEPART	59	/	87	80	/	51	51	/	69	79	/	62	0					
PM	4:00 PM	1	17	2	10	9	3	5	7	3	2	7	6	72	0	0	0	0	0
	4:15 PM	2	12	3	9	6	4	2	6	1	1	11	8	65	0	0	0	0	0
	4:30 PM	1	8	1	11	8	2	7	13	2	2	8	5	68	0	0	0	0	0
	4:45 PM	0	5	1	6	4	1	3	8	0	1	7	4	40	0	0	0	0	0
	5:00 PM	2	11	0	8	8	2	4	10	2	0	6	6	59	0	0	0	0	0
	5:15 PM	1	5	1	5	2	0	2	5	1	1	9	4	36	0	0	0	0	0
	5:30 PM	0	9	1	12	3	2	6	11	2	1	8	7	62	0	0	0	0	0
	5:45 PM	1	7	0	8	1	1	1	5	1	1	5	5	36	0	0	0	0	0
	VOLUMES	8	74	9	69	41	15	30	65	12	9	61	45	438	0	0	0	0	0
	APPROACH %	9%	81%	10%	55%	33%	12%	28%	61%	11%	8%	53%	39%						
	APP/DEPART	91	/	149	125	/	62	107	/	143	115	/	84	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	4	42	7	36	27	10	17	34	6	6	33	23	245					
	APPROACH %	8%	79%	13%	49%	37%	14%	30%	60%	11%	10%	53%	37%						
	PEAK HR FACTOR		0.663			0.830			0.648			0.775		0.851					
	APP/DEPART	53	/	82	73	/	39	57	/	77	62	/	47	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	22nd	LOCATION #:	1
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

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

		NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL
	LANES:	0	2	0	0	2	0	0	1	0	0	1	0						
AM	7:00 AM	0	13	0	8	5	5	3	5	2	0	6	7	54					0
	7:15 AM	0	5	1	4	3	1	3	14	1	1	8	9	49					0
	7:30 AM	4	5	3	5	5	1	0	10	2	1	9	3	46					0
	7:45 AM	1	10	2	8	6	2	5	6	2	0	15	7	64					0
	8:00 AM	4	6	0	11	13	2	6	8	2	4	4	10	68					0
	8:15 AM	2	20	4	6	17	2	3	11	4	1	14	7	90					0
	8:30 AM	4	10	1	13	4	3	2	6	0	1	15	8	66					0
	8:45 AM	2	6	0	6	7	2	9	6	2	1	12	11	64					0
	VOLUMES	17	74	11	59	59	18	31	64	15	9	81	62	499	0	0	0	0	0
	APPROACH %	17%	73%	11%	43%	43%	13%	28%	58%	14%	6%	53%	41%						
	APP/DEPART	102	/	167	135	/	83	110	/	134	152	/	116	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	11	46	7	37	39	9	16	30	8	6	47	32	287					
	APPROACH %	17%	72%	11%	44%	46%	11%	29%	56%	15%	7%	55%	38%						
	PEAK HR FACTOR		0.611			0.833			0.764			0.904		0.802					
	APP/DEPART	64	/	93	85	/	53	54	/	74	85	/	67	0					
PM	4:00 PM	1	18	2	11	9	3	5	9	3	2	8	7	77					0
	4:15 PM	2	12	3	9	7	4	2	7	1	1	13	8	68					0
	4:30 PM	1	9	1	11	8	2	7	15	2	2	10	5	72					0
	4:45 PM	0	5	1	7	5	1	3	8	0	1	7	4	41					0
	5:00 PM	2	12	0	8	8	2	4	10	2	0	7	8	62					0
	5:15 PM	1	5	1	5	2	0	2	5	1	1	10	5	38					0
	5:30 PM	0	9	1	12	3	2	6	11	2	1	8	7	62					0
	5:45 PM	1	7	0	8	1	1	1	5	1	1	5	5	36					0
	VOLUMES	8	76	9	70	42	15	30	69	12	9	67	48	455	0	0	0	0	0
	APPROACH %	9%	82%	10%	55%	33%	12%	27%	62%	11%	7%	54%	39%						
	APP/DEPART	93	/	154	127	/	63	111	/	148	124	/	90	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	4	44	7	37	28	10	17	38	6	6	38	24	258					
	APPROACH %	7%	80%	13%	49%	37%	13%	28%	62%	10%	9%	56%	35%						
	PEAK HR FACTOR		0.649			0.833			0.649			0.761		0.842					
	APP/DEPART	55	/	84	75	/	40	61	/	82	67	/	52	0					

INTERSECTION TURNING MOVEMENT COUNTS

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

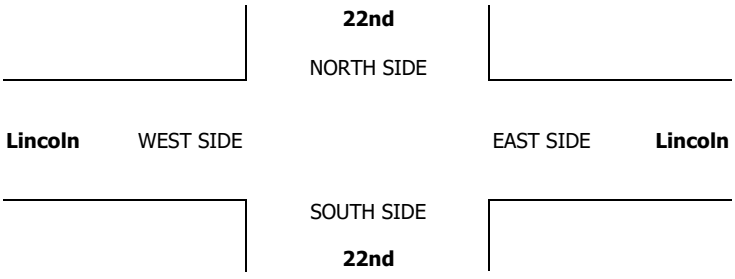
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	22nd	LOCATION #:	1
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 1: PASSENGER VEHICLES

NOTES:

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

		NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	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	8	0	6	5	2	3	3	0	0	3	4	34	0	0	0	0	0
	7:15 AM	0	3	1	2	3	1	3	12	1	1	2	6	35	0	0	0	0	0
	7:30 AM	1	3	3	3	3	1	0	8	2	1	6	3	34	0	0	0	0	0
	7:45 AM	1	7	2	6	6	2	5	6	2	0	12	7	56	0	0	0	0	0
	8:00 AM	4	1	0	11	11	2	4	6	2	4	4	7	56	0	0	0	0	0
	8:15 AM	2	18	4	6	15	2	3	9	2	1	12	7	81	0	0	0	0	0
	8:30 AM	4	8	1	5	4	3	2	6	0	1	8	8	50	0	0	0	0	0
	8:45 AM	0	6	0	6	7	2	7	6	2	1	7	3	47	0	0	0	0	0
	VOLUMES	12	54	11	45	54	15	27	56	11	9	54	45	393	0	0	0	0	0
	APPROACH %	16%	70%	14%	39%	47%	13%	29%	60%	12%	8%	50%	42%						
	APP/DEPART	77	/	126	114	/	74	94	/	112	108	/	81	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	11	34	7	28	36	9	14	27	6	6	36	29	243					
	APPROACH %	21%	65%	13%	38%	49%	12%	30%	57%	13%	8%	51%	41%						
	PEAK HR FACTOR		0.542			0.760			0.839			0.888		0.750					
	APP/DEPART	52	/	77	73	/	48	47	/	62	71	/	56	0					
PM	4:00 PM	1	15	2	9	9	3	5	6	3	2	6	5	66	0	0	0	0	0
	4:15 PM	2	12	3	9	5	4	2	5	1	1	10	8	62	0	0	0	0	0
	4:30 PM	1	7	1	11	8	2	7	11	2	2	7	5	64	0	0	0	0	0
	4:45 PM	0	5	1	5	3	1	3	8	0	1	7	4	38	0	0	0	0	0
	5:00 PM	2	10	0	8	8	2	4	10	2	0	5	5	56	0	0	0	0	0
	5:15 PM	1	5	1	5	2	0	2	5	1	1	8	3	34	0	0	0	0	0
	5:30 PM	0	9	1	12	3	2	6	11	2	1	8	7	62	0	0	0	0	0
	5:45 PM	1	7	0	8	1	1	1	5	1	1	5	5	36	0	0	0	0	0
	VOLUMES	8	70	9	67	39	15	30	61	12	9	56	42	418	0	0	0	0	0
	APPROACH %	9%	80%	10%	55%	32%	12%	29%	59%	12%	8%	52%	39%						
	APP/DEPART	87	/	142	121	/	60	103	/	137	107	/	79	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	4	39	7	34	25	10	17	30	6	6	30	22	230					
	APPROACH %	8%	78%	14%	49%	36%	14%	32%	57%	11%	10%	52%	38%						
	PEAK HR FACTOR		0.694			0.821			0.663			0.763		0.871					
	APP/DEPART	50	/	78	69	/	37	53	/	71	58	/	44	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

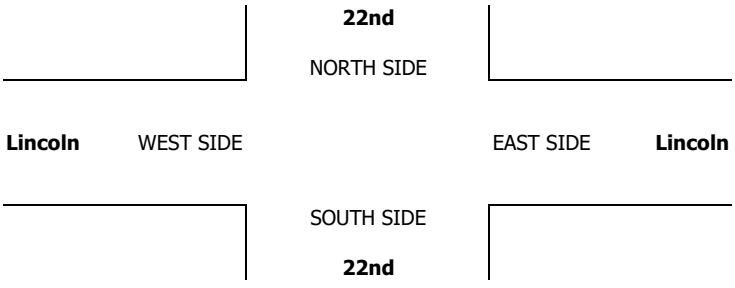
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	22nd	LOCATION #:	1
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

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

		NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	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	1	0	0	0	0	0	0	2	2	5	0	0	0	0	0
	7:15 AM	0	0	0	1	0	0	0	1	0	0	1	2	5	0	0	0	0	0
	7:30 AM	0	1	0	1	1	0	0	1	0	0	2	0	6	0	0	0	0	0
	7:45 AM	0	2	0	1	0	0	0	0	0	0	2	0	5	0	0	0	0	0
	8:00 AM	0	3	0	0	1	0	1	1	0	0	0	2	8	0	0	0	0	0
	8:15 AM	0	0	0	0	1	0	0	1	0	0	1	0	3	0	0	0	0	0
	8:30 AM	0	0	0	3	0	0	0	0	0	0	1	0	4	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0
	VOLUMES	0	6	0	7	3	0	1	4	0	0	12	8	41	0	0	0	0	0
	APPROACH %	0%	100%	0%	70%	30%	0%	20%	80%	0%	0%	60%	40%						
	APP/DEPART	6	/	15	10	/	3	5	/	11	20	/	12	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	5	0	4	2	0	1	2	0	0	4	2	20					
	APPROACH %	0%	100%	0%	67%	33%	0%	33%	67%	0%	0%	67%	33%						
	PEAK HR FACTOR		0.417			0.500			0.375			0.750		0.625					
	APP/DEPART	5	/	8	6	/	2	3	/	6	6	/	4	0					
PM	4:00 PM	0	2	0	1	0	0	0	0	0	0	1	1	5	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	1	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0
	4:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0
	5:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	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	4	0	2	2	0	0	2	0	0	2	2	14	0	0	0	0	0
	APPROACH %	0%	100%	0%	50%	50%	0%	0%	100%	0%	0%	50%	50%						
	APP/DEPART	4	/	6	4	/	2	2	/	4	4	/	2	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	3	0	2	2	0	0	2	0	0	1	1	11					
	APPROACH %	0%	100%	0%	50%	50%	0%	0%	100%	0%	0%	50%	50%						
	PEAK HR FACTOR		0.375			0.500			0.500			0.250		0.550					
	APP/DEPART	3	/	4	4	/	2	2	/	4	2	/	1	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	22nd	LOCATION #:	1
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 3: 3-AXLE TRUCKS

NOTES:

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

	NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	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	1	1	0	0	0	3	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	2	0	3	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	1	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	1	0	0	0	0	1	3	0	0	0	0	0
VOLUMES	1	4	0	0	0	0	1	1	2	0	3	1	13	0	0	0	0	0
APPROACH %	20%	80%	0%	0%	0%	0%	25%	25%	50%	0%	75%	25%						
APP/DEPART	5	/	6	0	/	2	4	/	1	4	/	4	0					
BEGIN PEAK HR		7:45 AM																
VOLUMES	0	2	0	0	0	0	0	0	1	0	1	0	4					
APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%						
PEAK HR FACTOR		0.500			0.000			0.250			0.250		0.500					
APP/DEPART	2	/	2	0	/	1	1	/	0	1	/	1	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	1	0	0	0	0	1	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	1	0	1	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	1	0	0	1	0	2	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%						
APP/DEPART	0	/	0	0	/	0	1	/	1	1	/	1	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1					
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.000			0.250			0.000		0.250					
APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					

22nd

NORTH SIDE

Lincoln WEST SIDE EAST SIDE **Lincoln**

SOUTH SIDE

22nd

INTERSECTION TURNING MOVEMENT COUNTS

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

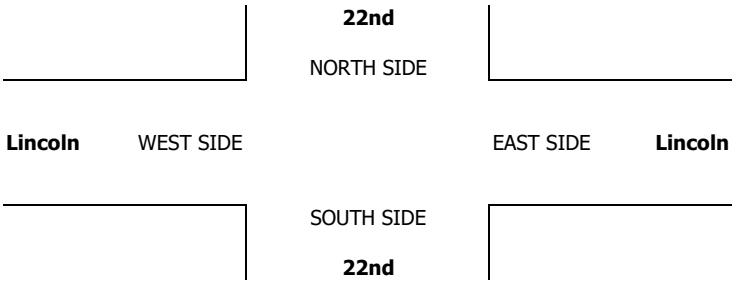
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	22nd	LOCATION #:	1
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

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

		NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	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	1	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	1	0	2	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	VOLUMES	1	1	0	1	0	1	0	0	0	0	1	1	6	0	0	0	0	0
	APPROACH %	50%	50%	0%	50%	0%	50%	0%	0%	0%	0%	50%	50%						
	APP/DEPART	2	/	2	2	/	0	0	/	1	2	/	3	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	0	1	0	0	0	0	0	0	1	0	2					
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.000			0.250			0.000			0.250		0.250					
	APP/DEPART	0	/	0	1	/	0	0	/	1	1	/	1	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	1	0	1	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	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	1	1	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	2	1	3	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	33%						
	APP/DEPART	0	/	1	0	/	0	0	/	0	3	/	2	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	2	0	2					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.500		0.500					
	APP/DEPART	0	/	0	0	/	0	0	/	0	2	/	2	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

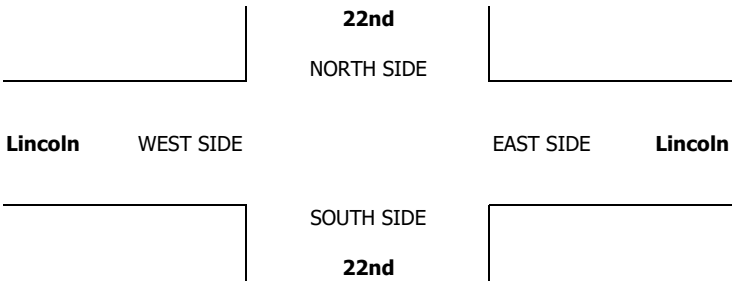
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	22nd	LOCATION #:	1
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 5: RV

NOTES:

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

		NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	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		7:45 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
PM	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					



INTERSECTION TURNING MOVEMENT COUNTS

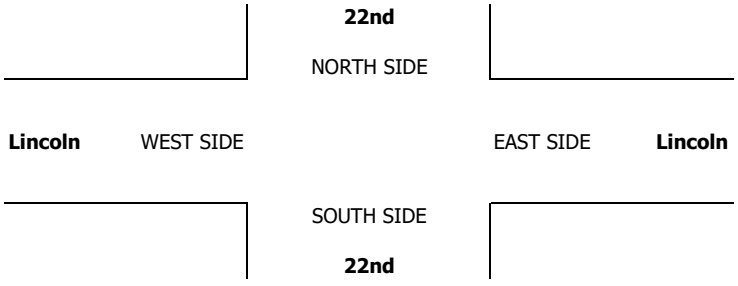
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	22nd	LOCATION #:	1
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 6:	NOTES:
BUSES	

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

	NORTHBOUND 22nd			SOUTHBOUND 22nd			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	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		7:45 AM																
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
PM																		
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	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	1	0	0	0	0	1	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1					
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.000			0.250			0.000		0.250					
APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					



T42321

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
Tue, Aug 15, 23	NORTH & SOUTH:	12th	LOCATION #:	3
	EAST & WEST:	Lincoln	CONTROL:	STOP N

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W   E ►
S ▼

		NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL
	LANES:	0	X	0	X	X	X	X	1	0	0	1	X		0	0	0	0	
AM	7:00 AM	0	0	0	0	0	0	0	7	0	0	7	0	14	0	0	0	0	0
AM	7:15 AM	0	0	1	0	0	0	0	18	0	1	12	0	32	0	0	0	0	0
AM	7:30 AM	0	0	2	0	0	0	0	17	0	1	8	0	28	0	0	0	0	0
AM	7:45 AM	2	0	4	0	0	0	0	13	0	1	16	0	36	0	0	0	0	0
AM	8:00 AM	1	0	2	0	0	0	0	13	2	1	13	0	32	0	0	0	0	0
AM	8:15 AM	0	0	2	0	0	0	0	20	0	4	21	0	47	0	0	0	0	0
AM	8:30 AM	1	0	4	0	0	0	0	13	2	5	12	0	37	0	0	0	0	0
AM	8:45 AM	0	0	1	0	0	0	0	13	0	2	17	0	33	0	0	0	0	0
AM	VOLUMES	4	0	16	0	0	0	0	114	4	15	106	0	259	0	0	0	0	0
AM	APPROACH %	20%	0%	80%	0%	0%	0%	0%	97%	3%	12%	88%	0%						
AM	APP/DEPART	20	/	0	0	/	19	118	/	130	121	/	110	0					
AM	BEGIN PEAK HR		7:45 AM																
AM	VOLUMES	4	0	12	0	0	0	0	59	4	11	62	0	152					
AM	APPROACH %	25%	0%	75%	0%	0%	0%	0%	94%	6%	15%	85%	0%						
AM	PEAK HR FACTOR		0.667			0.000			0.788			0.730		0.809					
AM	APP/DEPART	16	/	0	0	/	15	63	/	71	73	/	66	0					
PM	4:00 PM	1	0	1	0	0	0	0	17	0	3	16	0	38	0	0	0	0	0
PM	4:15 PM	2	0	2	0	0	0	0	13	2	1	18	0	38	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	23	0	2	13	0	38	0	0	0	0	0
PM	4:45 PM	1	0	0	0	0	0	0	10	1	0	11	0	23	0	0	0	0	0
PM	5:00 PM	1	0	3	0	0	0	0	14	0	1	12	0	31	0	0	0	0	0
PM	5:15 PM	0	0	0	0	0	0	0	8	0	3	11	0	22	0	0	0	0	0
PM	5:30 PM	0	0	1	0	0	0	0	20	1	1	14	0	37	0	0	0	0	0
PM	5:45 PM	0	0	2	0	0	0	0	11	1	1	12	0	27	0	0	0	0	0
PM	VOLUMES	5	0	9	0	0	0	0	116	5	12	107	0	254	0	0	0	0	0
PM	APPROACH %	36%	0%	64%	0%	0%	0%	0%	96%	4%	10%	90%	0%						
PM	APP/DEPART	14	/	0	0	/	17	121	/	125	119	/	112	0					
PM	BEGIN PEAK HR		4:00 PM																
PM	VOLUMES	4	0	3	0	0	0	0	63	3	6	58	0	137					
PM	APPROACH %	57%	0%	43%	0%	0%	0%	0%	95%	5%	9%	91%	0%						
PM	PEAK HR FACTOR		0.438			0.000			0.717			0.842		0.901					
PM	APP/DEPART	7	/	0	0	/	9	66	/	66	64	/	62	0					

12th

NORTH SIDE

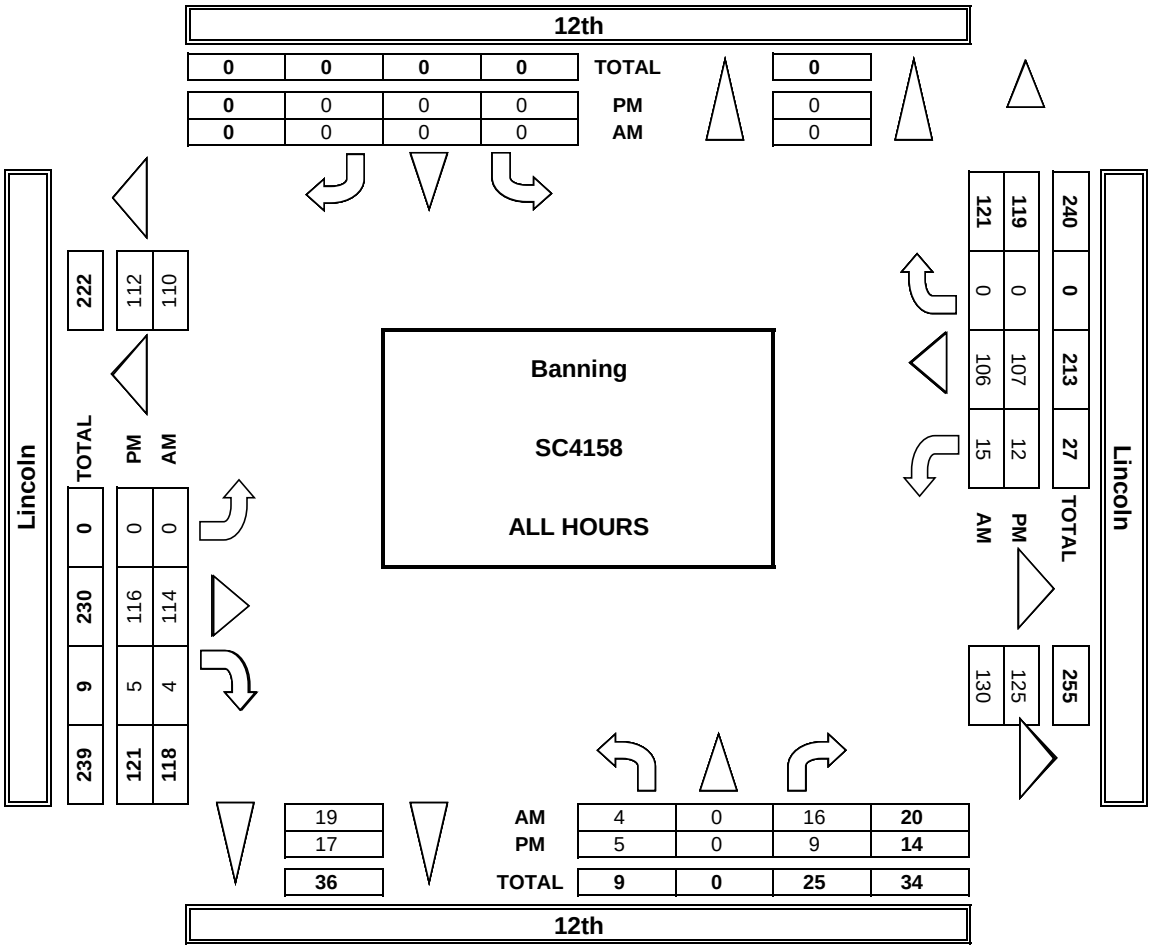
Lincoln WEST SIDE EAST SIDE **Lincoln**

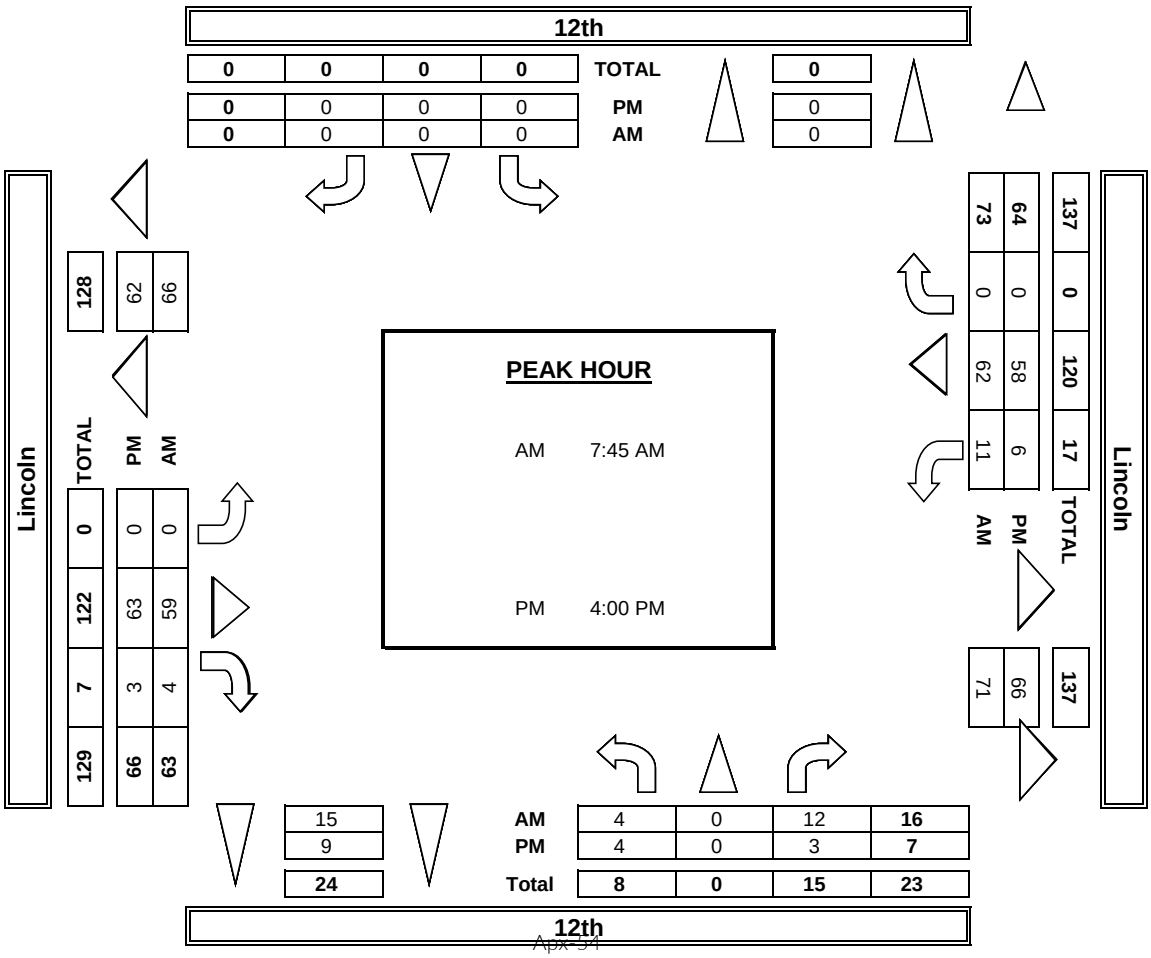
SOUTH SIDE

12th

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	12th	LOCATION #:	3
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP N

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

		NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	9	0	0	9	0	18					0
	7:15 AM	0	0	1	0	0	0	0	19	0	1	16	0	36					0
	7:30 AM	0	0	2	0	0	0	0	18	0	1	10	0	31					0
	7:45 AM	2	0	4	0	0	0	0	14	0	1	19	0	40					0
	8:00 AM	2	0	2	0	0	0	0	14	2	2	14	0	34					0
	8:15 AM	0	0	2	0	0	0	0	21	0	4	21	0	48					0
	8:30 AM	1	0	5	0	0	0	0	14	2	7	16	0	45					0
	8:45 AM	0	0	1	0	0	0	0	13	0	2	21	0	37					0
	VOLUMES	5	0	17	0	0	0	0	120	4	18	124	0	286	0	0	0	0	0
	APPROACH %	21%	0%	79%	0%	0%	0%	0%	97%	3%	12%	88%	0%						
	APP/DEPART	21	/	0	0	/	22	124	/	136	142	/	129	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	5	0	13	0	0	0	0	62	4	14	70	0	166					
	APPROACH %	26%	0%	74%	0%	0%	0%	0%	94%	6%	16%	84%	0%						
	PEAK HR FACTOR		0.708			0.000			0.799			0.830		0.871					
	APP/DEPART	17	/	0	0	/	18	66	/	74	83	/	74	0					
PM	4:00 PM	1	0	1	0	0	0	0	20	0	3	17	0	42					0
	4:15 PM	2	0	2	0	0	0	0	14	2	1	20	0	41					0
	4:30 PM	0	0	0	0	0	0	0	25	0	2	15	0	42					0
	4:45 PM	1	0	0	0	0	0	0	11	1	0	11	0	24					0
	5:00 PM	1	0	3	0	0	0	0	14	0	1	15	0	34					0
	5:15 PM	0	0	0	0	0	0	0	8	0	4	13	0	24					0
	5:30 PM	0	0	1	0	0	0	0	20	1	1	14	0	37					0
	5:45 PM	0	0	2	0	0	0	0	11	1	1	13	0	28					0
	VOLUMES	5	0	9	0	0	0	0	121	5	13	117	0	269	0	0	0	0	0
	APPROACH %	36%	0%	64%	0%	0%	0%	0%	96%	4%	10%	90%	0%						
	APP/DEPART	14	/	0	0	/	18	126	/	130	129	/	122	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	4	0	3	0	0	0	0	68	3	6	63	0	147					
	APPROACH %	57%	0%	43%	0%	0%	0%	0%	96%	4%	9%	91%	0%						
	PEAK HR FACTOR		0.438			0.000			0.724			0.821		0.886					
	APP/DEPART	7	/	0	0	/	9	71	/	71	69	/	67	0					

INTERSECTION TURNING MOVEMENT COUNTS

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

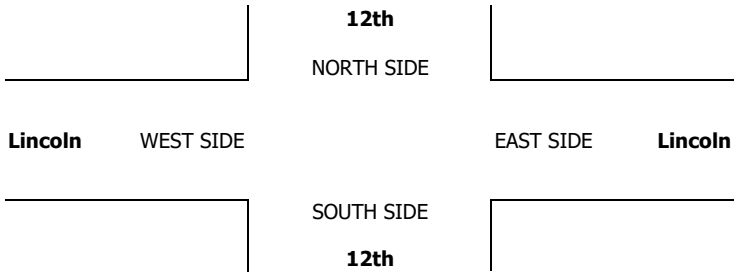
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	12th	LOCATION #:	3
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP N

CLASS 1: PASSENGER VEHICLES

NOTES:

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

		NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	5	0	0	3	0	8	0	0	0	0	0
	7:15 AM	0	0	1	0	0	0	0	17	0	1	7	0	26	0	0	0	0	0
	7:30 AM	0	0	2	0	0	0	0	15	0	1	5	0	23	0	0	0	0	0
	7:45 AM	2	0	4	0	0	0	0	12	0	1	13	0	32	0	0	0	0	0
	8:00 AM	0	0	2	0	0	0	0	12	2	0	12	0	28	0	0	0	0	0
	8:15 AM	0	0	2	0	0	0	0	19	0	4	21	0	46	0	0	0	0	0
	8:30 AM	1	0	3	0	0	0	0	11	2	2	8	0	27	0	0	0	0	0
	8:45 AM	0	0	1	0	0	0	0	13	0	2	11	0	27	0	0	0	0	0
	VOLUMES	3	0	15	0	0	0	0	104	4	11	80	0	217	0	0	0	0	0
	APPROACH %	17%	0%	83%	0%	0%	0%	0%	96%	4%	12%	88%	0%						
	APP/DEPART	18	/	0	0	/	15	108	/	119	91	/	83	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	3	0	11	0	0	0	0	54	4	7	54	0	133					
	APPROACH %	21%	0%	79%	0%	0%	0%	0%	93%	7%	11%	89%	0%						
	PEAK HR FACTOR		0.583			0.000			0.763			0.610		0.723					
	APP/DEPART	14	/	0	0	/	11	58	/	65	61	/	57	0					
PM	4:00 PM	1	0	1	0	0	0	0	15	0	3	14	0	34	0	0	0	0	0
	4:15 PM	2	0	2	0	0	0	0	12	2	1	17	0	36	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	21	0	2	12	0	35	0	0	0	0	0
	4:45 PM	1	0	0	0	0	0	0	9	1	0	11	0	22	0	0	0	0	0
	5:00 PM	1	0	3	0	0	0	0	14	0	1	10	0	29	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	8	0	2	9	0	19	0	0	0	0	0
	5:30 PM	0	0	1	0	0	0	0	20	1	1	14	0	37	0	0	0	0	0
	5:45 PM	0	0	2	0	0	0	0	11	1	1	11	0	26	0	0	0	0	0
	VOLUMES	5	0	9	0	0	0	0	110	5	11	98	0	238	0	0	0	0	0
	APPROACH %	36%	0%	64%	0%	0%	0%	0%	96%	4%	10%	90%	0%						
	APP/DEPART	14	/	0	0	/	16	115	/	119	109	/	103	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	4	0	3	0	0	0	0	57	3	6	54	0	127					
	APPROACH %	57%	0%	43%	0%	0%	0%	0%	95%	5%	10%	90%	0%						
	PEAK HR FACTOR		0.438			0.000			0.714			0.833		0.882					
	APP/DEPART	7	/	0	0	/	9	60	/	60	60	/	58	0					



INTERSECTION TURNING MOVEMENT COUNTS

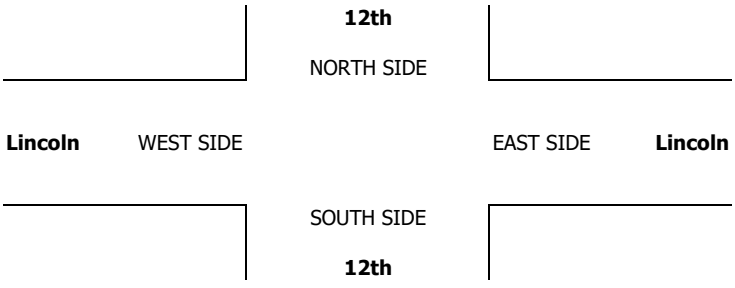
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	12th	LOCATION #:	3
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP N

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

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

		NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	4	0	5	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	1	0	0	3	0	4	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	2	0	0	3	0	5	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	1	0	0	2	0	3	0	0	0	0	0
	8:00 AM	1	0	0	0	0	0	0	1	0	1	1	0	4	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
	8:30 AM	0	0	1	0	0	0	0	2	0	2	2	0	7	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0
	VOLUMES	1	0	1	0	0	0	0	9	0	3	20	0	34	0	0	0	0	0
	APPROACH %	50%	0%	50%	0%	0%	0%	0%	100%	0%	13%	87%	0%						
	APP/DEPART	2	/	0	0	/	3	9	/	10	23	/	21	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	1	0	1	0	0	0	0	5	0	3	5	0	15					
	APPROACH %	50%	0%	50%	0%	0%	0%	0%	100%	0%	38%	63%	0%						
	PEAK HR FACTOR		0.500			0.000			0.625			0.500		0.536					
	APP/DEPART	2	/	0	0	/	3	5	/	6	8	/	6	0					
PM	4:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	3	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	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	1	0	1	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	4	0	1	5	0	10	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	17%	83%	0%						
	APP/DEPART	0	/	0	0	/	1	4	/	4	6	/	5	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	0	0	0	0	4	0	0	2	0	6					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.000			0.000			1.000			0.250		0.500					
	APP/DEPART	0	/	0	0	/	0	4	/	4	2	/	2	0					



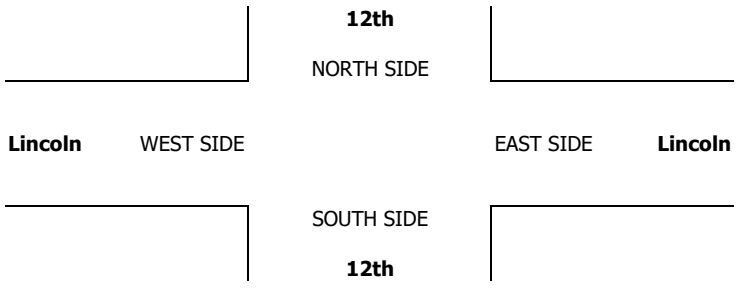
INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	12th	LOCATION #:	3
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP N

CLASS 3:	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼
3-AXLE TRUCKS			

		NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	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	1	1	0	2	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
	VOLUMES	0	0	0	0	0	0	0	1	0	1	4	0	6	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	20%	80%	0%						
	APP/DEPART	0	/	0	0	/	1	1	/	1	5	/	4	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	1	1	0	2					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250					
	APP/DEPART	0	/	0	0	/	1	0	/	0	2	/	1	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	1	0	0	0	0	1	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	1	0	1	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	1	0	0	1	0	2	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%						
	APP/DEPART	0	/	0	0	/	0	1	/	1	1	/	1	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.250			0.000		0.250					
	APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	12th	LOCATION #:	3
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP N

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

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

	NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL
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	1	0	1	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	1	0	1	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
AM VOLUMES	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
AM APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
AM APP/DEPART	0	/	0	0	/	0	0	/	0	2	/	2	0					
AM BEGIN PEAK HR		7:45 AM																
AM PEAK VOLUMES	0	0	0	0	0	0	0	0	0	0	2	0	2					
AM PEAK APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
AM PEAK HR FACTOR		0.000			0.000			0.000			0.500		0.500					
AM PEAK APP/DEPART	0	/	0	0	/	0	0	/	0	2	/	2	0					
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	1	0	1	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	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	1	0	1	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
PM VOLUMES	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0
PM APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
PM APP/DEPART	0	/	0	0	/	0	0	/	0	3	/	3	0					
PM BEGIN PEAK HR		4:00 PM																
PM PEAK VOLUMES	0	0	0	0	0	0	0	0	0	0	2	0	2					
PM PEAK APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
PM PEAK HR FACTOR		0.000			0.000			0.000			0.500		0.500					
PM PEAK APP/DEPART	0	/	0	0	/	0	0	/	0	2	/	2	0					

12th

NORTH SIDE

Lincoln WEST SIDE EAST SIDE **Lincoln**

SOUTH SIDE

12th

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	12th	LOCATION #:	3
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP N

CLASS 5:	NOTES:
RV	

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

		NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	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		7:45 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
PM	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					

12th

NORTH SIDE

Lincoln WEST SIDE EAST SIDE **Lincoln**

SOUTH SIDE

12th

INTERSECTION TURNING MOVEMENT COUNTS

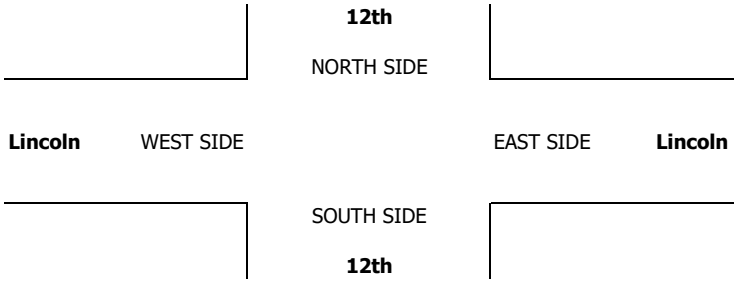
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	12th	LOCATION #:	3
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP N

CLASS 6:	NOTES:
BUSES	

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

	NORTHBOUND 12th			SOUTHBOUND 12th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL
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
AM VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
AM APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
BEGIN PEAK HR		7:45 AM																
AM VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
AM 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					
AM APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	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
PM VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
PM APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
PM APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					
BEGIN PEAK HR		4:00 PM																
PM VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1					
PM APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.000			0.250			0.000		0.250					
PM APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					



INTERSECTION TURNING MOVEMENT COUNTS

T42321

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

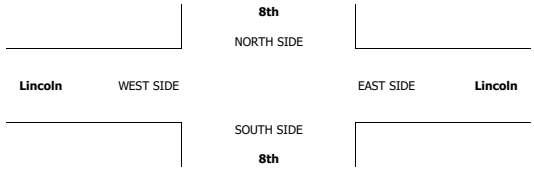
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
Tue, Aug 15, 23	NORTH & SOUTH:	8th	LOCATION #:	2
	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

NOTES:

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

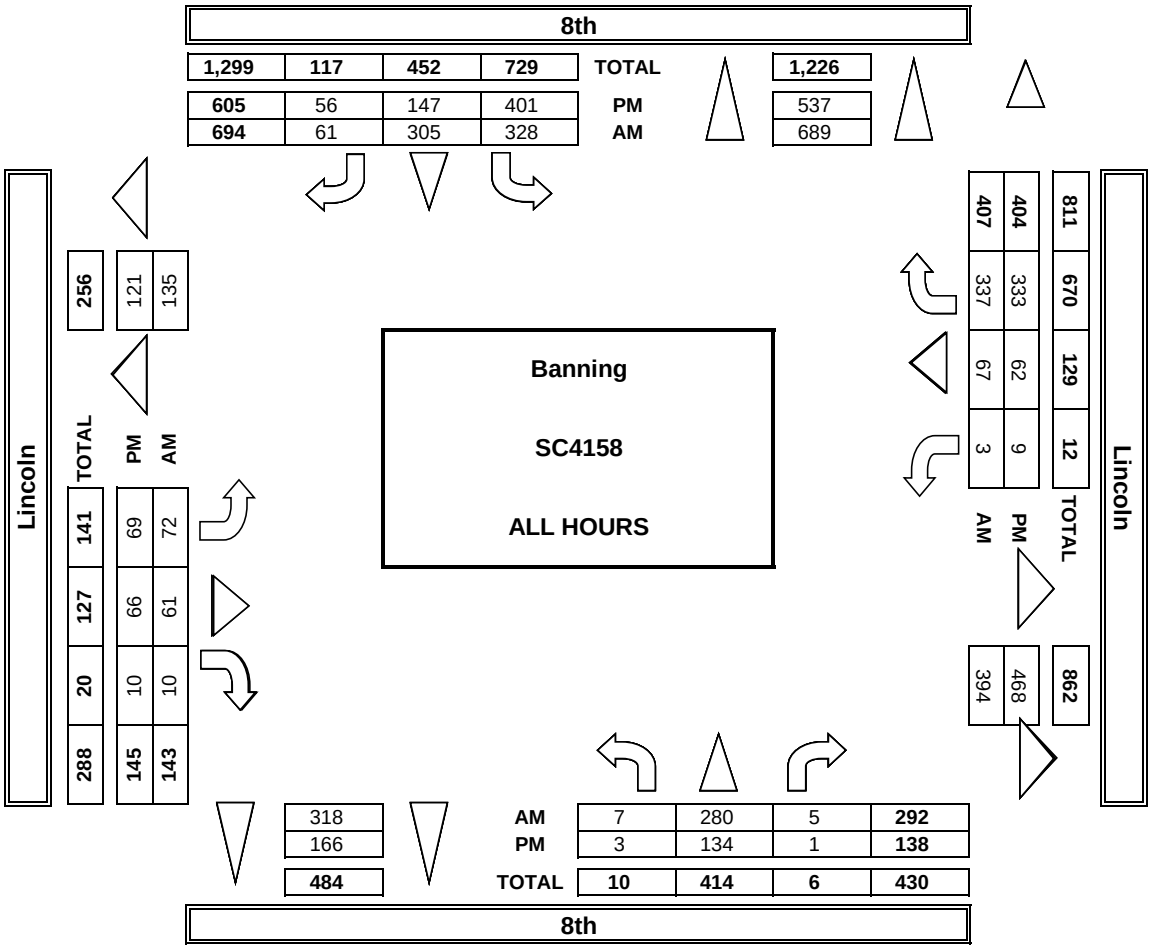
		NORTHBOUND (8th)			SOUTHBOUND (8th)			EASTBOUND (Lincoln)			WESTBOUND (Lincoln)			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	2	22	0	39	30	6	4	4	3	1	3	19	133
	7:15 AM	2	25	0	35	26	9	10	5	3	1	6	41	163
	7:30 AM	0	24	1	37	21	4	10	7	1	0	4	41	150
	7:45 AM	1	35	0	49	42	5	7	9	1	0	10	42	201
	8:00 AM	1	50	1	41	64	7	9	11	0	0	9	53	246
	8:15 AM	1	76	1	39	82	9	10	13	0	0	16	54	301
	8:30 AM	0	31	1	37	24	12	11	7	1	1	11	49	185
	8:45 AM	0	17	1	51	16	9	11	5	1	0	8	38	157
	VOLUMES	7	280	5	328	305	61	72	61	10	3	67	337	1,536
	APPROACH %	2%	96%	2%	47%	44%	9%	50%	43%	7%	1%	16%	83%	
	APP/DEPART	292	/	689	694	/	318	143	/	394	407	/	135	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	3	192	3	166	212	33	37	40	2	1	46	198	933
	APPROACH %	2%	97%	2%	40%	52%	8%	47%	51%	3%	0%	19%	81%	
	PEAK HR FACTOR		0.635			0.790			0.859			0.875		0.775
	APP/DEPART	198	/	427	411	/	215	79	/	209	245	/	82	0
PM	4:00 PM	0	26	0	50	27	10	6	12	2	1	6	44	184
	4:15 PM	0	23	0	48	18	11	6	9	1	0	9	42	167
	4:30 PM	1	18	0	42	24	6	16	11	0	3	9	63	193
	4:45 PM	1	13	0	51	17	4	9	4	1	1	7	37	145
	5:00 PM	0	17	0	58	17	6	8	9	3	0	4	29	151
	5:15 PM	0	9	1	58	14	5	3	6	1	2	11	50	160
	5:30 PM	0	18	0	52	14	7	14	9	2	2	9	28	155
	5:45 PM	1	10	0	42	16	7	7	6	0	0	7	40	136
	VOLUMES	3	134	1	401	147	56	69	66	10	9	62	333	1,292
	APPROACH %	2%	97%	1%	66%	24%	9%	48%	46%	7%	2%	15%	82%	
	APP/DEPART	138	/	537	605	/	166	145	/	468	404	/	121	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	2	80	0	191	86	31	37	36	4	5	31	186	690
	APPROACH %	2%	98%	0%	62%	28%	10%	48%	47%	5%	2%	14%	84%	
	PEAK HR FACTOR		0.788			0.888			0.713			0.740		0.889
	APP/DEPART	82	/	304	309	/	95	77	/	227	222	/	64	0

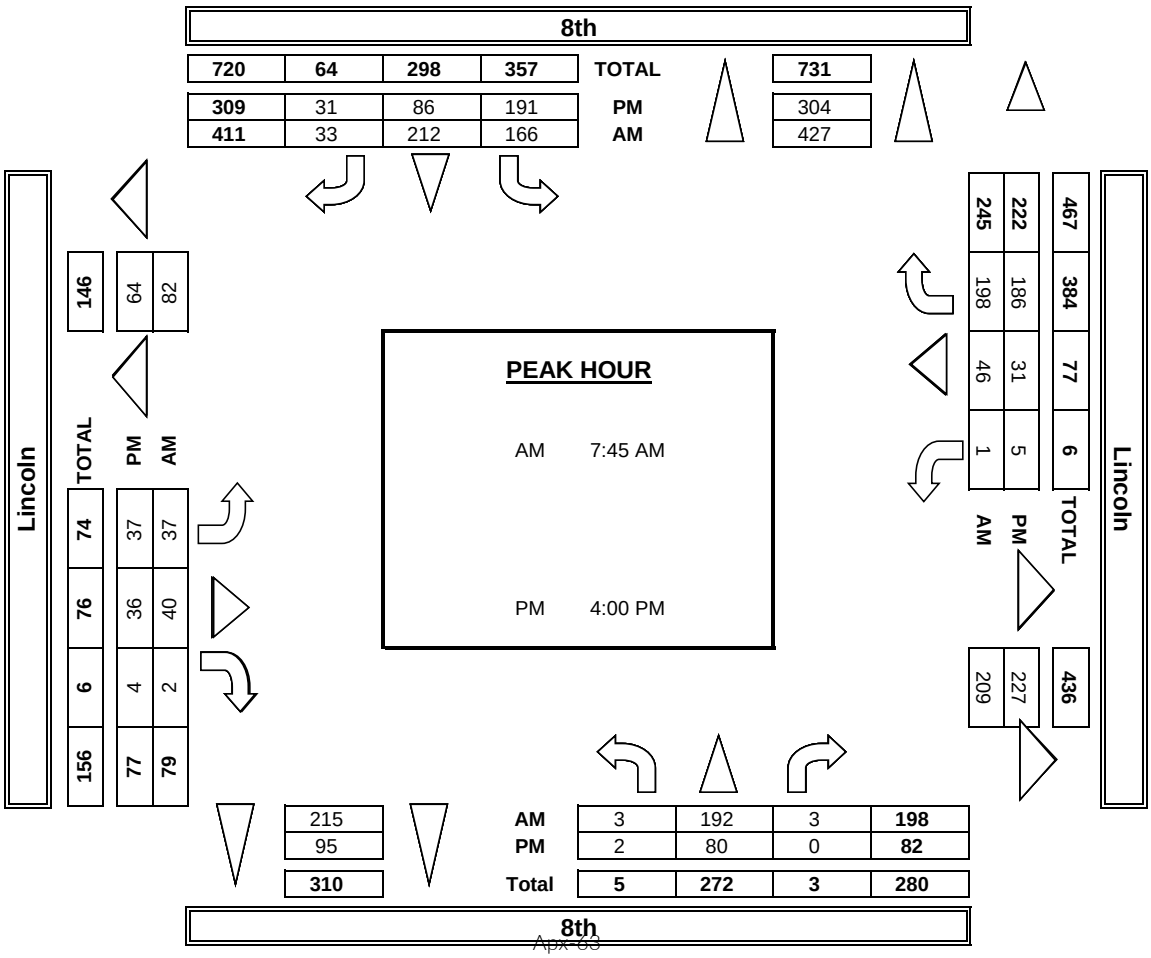
U-TURNS					
	NB	SB	EB	WB	TTL
AM 7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
	0	0	0	0	0
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
	0	1	0	0	1



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	8th	LOCATION #:	2
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

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

		NORTHBOUND 8th			SOUTHBOUND 8th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	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	2	22	0	47	34	7	6	6	3	1	4	19	149					0
	7:15 AM	2	26	0	46	28	12	10	6	3	2	8	50	192					0
	7:30 AM	0	25	1	44	21	5	11	7	1	0	5	46	164					0
	7:45 AM	1	36	0	53	42	5	7	9	1	0	11	51	215					0
	8:00 AM	1	51	1	47	65	8	11	12	0	0	9	61	264					0
	8:15 AM	1	77	1	45	85	10	11	14	0	0	16	62	319					0
	8:30 AM	0	31	1	41	24	15	13	8	1	1	15	57	206					0
	8:45 AM	0	17	1	59	17	10	12	6	1	0	10	38	170					0
	VOLUMES	7	284	5	380	315	70	79	66	10	4	76	383	1,679	0	0	0	0	0
	APPROACH %	2%	96%	2%	50%	41%	9%	51%	43%	6%	1%	16%	83%						
	APP/DEPART	296	/	746	765	/	329	155	/	451	463	/	153	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	3	195	3	185	215	38	41	42	2	1	51	230	1,004					
	APPROACH %	1%	97%	1%	42%	49%	9%	48%	49%	2%	0%	18%	82%						
	PEAK HR FACTOR		0.634			0.789			0.885			0.906		0.786					
	APP/DEPART	201	/	465	437	/	218	85	/	230	281	/	91	0					
PM	4:00 PM	0	26	0	59	27	10	6	14	2	1	7	50	201					0
	4:15 PM	0	23	0	56	18	13	6	9	1	0	9	45	179					0
	4:30 PM	1	18	0	46	24	7	17	11	0	3	12	64	202					0
	4:45 PM	1	13	0	56	20	4	10	4	1	1	7	39	155					0
	5:00 PM	0	17	0	64	17	8	9	9	3	0	6	29	162					0
	5:15 PM	0	9	1	63	14	5	3	6	1	2	13	51	167					0
	5:30 PM	0	18	0	58	14	7	14	9	2	4	9	29	164					0
	5:45 PM	1	10	0	46	17	7	9	6	0	0	8	40	144					0
	VOLUMES	3	134	1	446	151	61	73	68	10	11	70	344	1,371	0	0	0	0	0
	APPROACH %	2%	97%	1%	68%	23%	9%	48%	45%	7%	3%	16%	81%						
	APP/DEPART	138	/	551	658	/	172	151	/	515	425	/	133	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	2	80	0	216	89	34	39	38	4	5	34	196	736					
	APPROACH %	2%	98%	0%	64%	26%	10%	48%	47%	5%	2%	14%	83%						
	PEAK HR FACTOR		0.788			0.885			0.719			0.753		0.913					
	APP/DEPART	82	/	315	338	/	98	81	/	254	235	/	70	0					

INTERSECTION TURNING MOVEMENT COUNTS

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

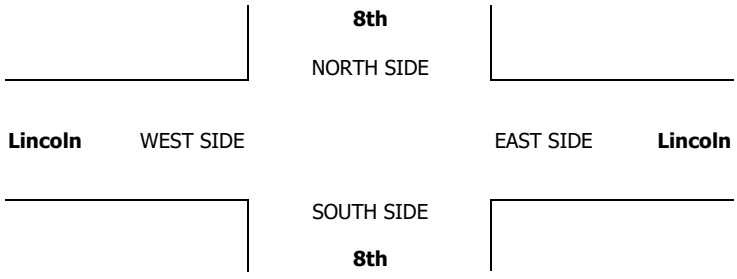
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	8th	LOCATION #:	2
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 1: PASSENGER VEHICLES

NOTES:

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

		NORTHBOUND 8th			SOUTHBOUND 8th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	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	2	22	0	32	28	5	1	2	3	1	2	19	117	0	0	0	0	0
	7:15 AM	2	24	0	25	25	7	10	4	3	0	4	34	138	0	0	0	0	0
	7:30 AM	0	23	1	30	21	3	8	7	1	0	3	37	134	0	0	0	0	0
	7:45 AM	1	34	0	44	42	5	7	9	1	0	9	35	187	0	0	0	0	0
	8:00 AM	1	48	1	34	63	5	6	10	0	0	9	46	223	0	0	0	0	0
	8:15 AM	1	75	1	34	80	8	9	12	0	0	16	48	284	0	0	0	0	0
	8:30 AM	0	31	1	33	24	9	10	5	1	1	5	43	163	0	0	0	0	0
	8:45 AM	0	17	1	44	15	8	10	3	1	0	5	38	142	0	0	0	0	0
	VOLUMES	7	274	5	276	298	50	61	52	10	2	53	300	1,388	0	0	0	0	0
	APPROACH %	2%	96%	2%	44%	48%	8%	50%	42%	8%	1%	15%	85%						
	APP/DEPART	286	/	635	624	/	310	123	/	333	355	/	110	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	3	188	3	145	209	27	32	36	2	1	39	172	857					
	APPROACH %	2%	97%	2%	38%	55%	7%	46%	51%	3%	0%	18%	81%						
	PEAK HR FACTOR		0.630			0.781			0.833			0.828		0.754					
	APP/DEPART	194	/	392	381	/	212	70	/	184	212	/	69	0					
PM	4:00 PM	0	26	0	42	27	10	6	11	2	1	5	39	169	0	0	0	0	0
	4:15 PM	0	23	0	42	18	10	6	9	1	0	9	40	158	0	0	0	0	0
	4:30 PM	1	18	0	37	24	5	15	11	0	3	7	62	183	0	1	0	0	1
	4:45 PM	1	13	0	48	14	4	8	4	1	1	7	35	136	0	0	0	0	0
	5:00 PM	0	17	0	53	17	5	7	9	3	0	3	29	143	0	0	0	0	0
	5:15 PM	0	9	1	54	14	5	3	6	1	2	8	49	152	0	0	0	0	0
	5:30 PM	0	18	0	48	14	7	14	9	2	1	9	27	149	0	0	0	0	0
	5:45 PM	1	10	0	40	15	7	6	6	0	0	6	40	131	0	0	0	0	0
	VOLUMES	3	134	1	364	143	53	65	65	10	8	54	321	1,222	0	1	0	0	1
	APPROACH %	2%	97%	1%	65%	25%	9%	46%	46%	7%	2%	14%	84%						
	APP/DEPART	138	/	521	561	/	161	140	/	430	383	/	110	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	2	80	0	169	83	29	35	35	4	5	28	176	647					
	APPROACH %	2%	98%	0%	60%	29%	10%	47%	47%	5%	2%	13%	84%						
	PEAK HR FACTOR		0.788			0.892			0.712			0.726		0.879					
	APP/DEPART	82	/	292	282	/	92	74	/	204	209	/	59	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

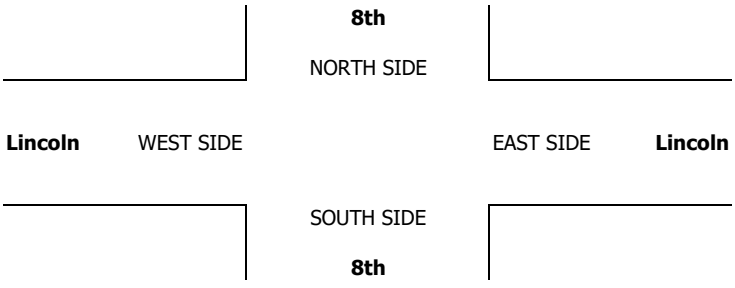
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	8th	LOCATION #:	2
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

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

		NORTHBOUND 8th			SOUTHBOUND 8th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	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	4	0	1	3	1	0	0	1	0	10	0	0	0	0	0
	7:15 AM	0	0	0	6	0	0	0	1	0	0	1	2	10	0	0	0	0	0
	7:30 AM	0	1	0	5	0	1	2	0	0	0	1	2	12	0	0	0	0	0
	7:45 AM	0	1	0	4	0	0	0	0	0	0	1	3	9	0	0	0	0	0
	8:00 AM	0	2	0	5	1	2	3	1	0	0	0	4	18	0	0	0	0	0
	8:15 AM	0	0	0	3	1	1	1	1	0	0	0	3	10	0	0	0	0	0
	8:30 AM	0	0	0	3	0	2	0	2	0	0	4	3	14	0	0	0	0	0
	8:45 AM	0	0	0	4	0	1	1	2	0	0	2	0	10	0	0	0	0	0
	VOLUMES	0	4	0	34	2	8	10	8	0	0	10	17	93	0	0	0	0	0
	APPROACH %	0%	100%	0%	77%	5%	18%	56%	44%	0%	0%	37%	63%						
	APP/DEPART	4	/	31	44	/	2	18	/	42	27	/	18	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	3	0	15	2	5	4	4	0	0	5	13	51					
	APPROACH %	0%	100%	0%	68%	9%	23%	50%	50%	0%	0%	28%	72%						
	PEAK HR FACTOR		0.375			0.688			0.500			0.643		0.708					
	APP/DEPART	3	/	20	22	/	2	8	/	19	18	/	10	0					
PM	4:00 PM	0	0	0	5	0	0	0	0	0	0	1	3	9	0	0	0	0	0
	4:15 PM	0	0	0	3	0	0	0	0	0	0	0	1	4	0	0	0	0	0
	4:30 PM	0	0	0	4	0	1	0	0	0	0	1	1	7	0	0	0	0	0
	4:45 PM	0	0	0	1	2	0	1	0	0	0	0	1	5	0	0	0	0	0
	5:00 PM	0	0	0	2	0	0	1	0	0	0	0	0	3	0	0	0	0	0
	5:15 PM	0	0	0	1	0	0	0	0	0	0	2	1	4	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	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
	VOLUMES	0	0	0	16	2	1	2	0	0	0	5	8	34	0	0	0	0	0
	APPROACH %	0%	0%	0%	84%	11%	5%	100%	0%	0%	0%	38%	62%						
	APP/DEPART	0	/	10	19	/	2	2	/	16	13	/	6	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	13	2	1	1	0	0	0	2	6	25					
	APPROACH %	0%	0%	0%	81%	13%	6%	100%	0%	0%	0%	25%	75%						
	PEAK HR FACTOR		0.000			0.800			0.250			0.500		0.694					
	APP/DEPART	0	/	7	16	/	2	1	/	13	8	/	3	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

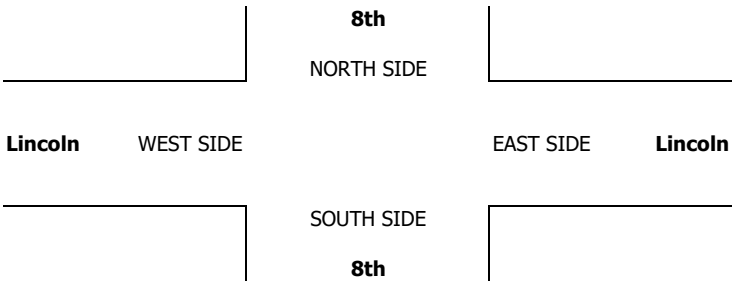
DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	8th	LOCATION #:	2
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 3: 3-AXLE TRUCKS

NOTES:

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

		NORTHBOUND 8th			SOUTHBOUND 8th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	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	1	0	0	0	0	1	0	0	0	0	0
	7:15 AM	0	1	0	0	0	1	0	0	0	1	1	2	6	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	1	1	0	0	0	0	0
	8:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	8:15 AM	0	1	0	0	0	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	2	0	2	0	0	0	0	0
	8:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	0
	VOLUMES	0	2	0	1	1	1	0	1	0	1	4	3	14	0	0	0	0	0
	APPROACH %	0%	100%	0%	33%	33%	33%	0%	100%	0%	13%	50%	38%						
	APP/DEPART	2	/	5	3	/	2	1	/	2	8	/	5	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	1	0	1	0	0	0	0	0	0	2	1	5					
	APPROACH %	0%	100%	0%	100%	0%	0%	0%	0%	0%	0%	67%	33%						
	PEAK HR FACTOR		0.250			0.250			0.000			0.375		0.625					
	APP/DEPART	1	/	2	1	/	0	0	/	1	3	/	2	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	1	0	0	0	0	0	1	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	5:15 PM	0	0	0	2	0	0	0	0	0	0	1	0	3	0	0	0	0	0
	5:30 PM	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0
	5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
	VOLUMES	0	0	0	5	1	0	1	0	0	0	1	1	9	0	0	0	0	0
	APPROACH %	0%	0%	0%	83%	17%	0%	100%	0%	0%	0%	50%	50%						
	APP/DEPART	0	/	2	6	/	1	1	/	5	2	/	1	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	0	0	0	1	0	0	0	0	1	2					
	APPROACH %	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%						
	PEAK HR FACTOR		0.000			0.000			0.250			0.250		0.500					
	APP/DEPART	0	/	2	0	/	0	1	/	0	1	/	0	0					



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	8th	LOCATION #:	2
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

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

		NORTHBOUND 8th			SOUTHBOUND 8th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	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	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0
	7:15 AM	0	0	0	4	0	1	0	0	0	0	0	1	6	0	0	0	0	0
	7:30 AM	0	0	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0
	8:15 AM	0	0	0	2	0	0	0	0	0	0	0	3	5	0	0	0	0	0
	8:30 AM	0	0	0	1	0	1	1	0	0	0	0	3	6	0	0	0	0	0
	8:45 AM	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0
	VOLUMES	0	0	0	13	0	2	1	0	0	0	0	13	29	0	0	0	0	0
	APPROACH %	0%	0%	0%	87%	0%	13%	100%	0%	0%	0%	0%	100%						
	APP/DEPART	0	/	14	15	/	0	1	/	13	13	/	2	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	0	3	0	1	1	0	0	0	0	11	16					
	APPROACH %	0%	0%	0%	75%	0%	25%	100%	0%	0%	0%	0%	100%						
	PEAK HR FACTOR		0.000			0.500			0.250			0.917		0.667					
	APP/DEPART	0	/	12	4	/	0	1	/	3	11	/	1	0					
PM	4:00 PM	0	0	0	2	0	0	0	0	0	0	0	1	3	0	0	0	0	0
	4:15 PM	0	0	0	2	0	1	0	0	0	0	0	1	4	0	0	0	0	0
	4:30 PM	0	0	0	1	0	0	0	0	0	0	1	0	2	0	0	0	0	0
	4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	5:00 PM	0	0	0	1	0	1	0	0	0	0	1	0	3	0	0	0	0	0
	5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	5:30 PM	0	0	0	1	0	0	0	0	0	1	0	0	2	0	0	0	0	0
	5:45 PM	0	0	0	2	0	0	1	0	0	0	0	0	3	0	0	0	0	0
	VOLUMES	0	0	0	11	0	2	1	0	0	1	2	2	19	0	0	0	0	0
	APPROACH %	0%	0%	0%	85%	0%	15%	100%	0%	0%	20%	40%	40%						
	APP/DEPART	0	/	3	13	/	1	1	/	11	5	/	4	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	6	0	1	0	0	0	0	1	2	10					
	APPROACH %	0%	0%	0%	86%	0%	14%	0%	0%	0%	0%	33%	67%						
	PEAK HR FACTOR		0.000			0.583			0.000			0.750		0.625					
	APP/DEPART	0	/	2	7	/	0	0	/	6	3	/	2	0					

8th

NORTH SIDE

Lincoln WEST SIDE EAST SIDE **Lincoln**

SOUTH SIDE

8th

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	8th	LOCATION #:	2
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 5:	NOTES:
RV	

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

		NORTHBOUND 8th			SOUTHBOUND 8th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	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		7:45 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
PM	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					

8th

NORTH SIDE

Lincoln WEST SIDE EAST SIDE **Lincoln**

SOUTH SIDE

8th

INTERSECTION TURNING MOVEMENT COUNTS

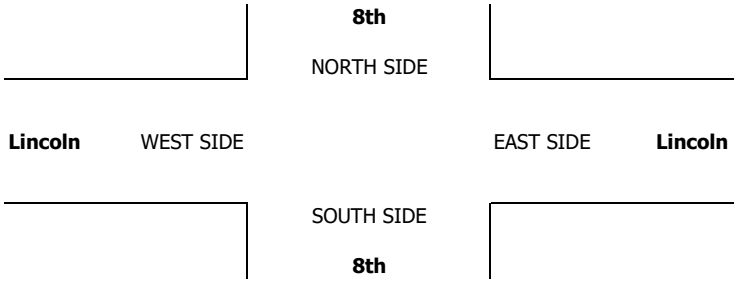
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Banning	PROJECT #:	SC4158
8/15/23	NORTH & SOUTH:	8th	LOCATION #:	2
TUESDAY	EAST & WEST:	Lincoln	CONTROL:	STOP ALL

CLASS 6:	NOTES:
BUSES	

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

		NORTHBOUND 8th			SOUTHBOUND 8th			EASTBOUND Lincoln			WESTBOUND Lincoln				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	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	1	2	0	0	0	0	0	0	0	3	0	0	0	0	0
	7:15 AM	0	0	0	0	1	0	0	0	0	0	0	2	3	0	0	0	0	0
	7:30 AM	0	0	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0
	7:45 AM	0	0	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0
	8:00 AM	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	4	4	0	0	0	0	0	0	4	12	0	0	0	0	0
	APPROACH %	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	100%						
	APP/DEPART	0	/	4	8	/	4	0	/	4	4	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	0	2	1	0	0	0	0	0	0	1	4					
	APPROACH %	0%	0%	0%	67%	33%	0%	0%	0%	0%	0%	0%	100%						
	PEAK HR FACTOR		0.000			0.750			0.000			0.250		0.500					
	APP/DEPART	0	/	1	3	/	1	0	/	2	1	/	0	0					
PM	4:00 PM	0	0	0	1	0	0	0	1	0	0	0	1	3	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0
	5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	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	1	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	0	0	5	1	0	0	1	0	0	0	1	8	0	0	0	0	0
	APPROACH %	0%	0%	0%	83%	17%	0%	0%	100%	0%	0%	0%	100%						
	APP/DEPART	0	/	1	6	/	1	1	/	6	1	/	0	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	3	1	0	0	1	0	0	0	1	6					
	APPROACH %	0%	0%	0%	75%	25%	0%	0%	100%	0%	0%	0%	100%						
	PEAK HR FACTOR		0.000			0.500			0.250			0.250		0.500					
	APP/DEPART	0	/	1	4	/	1	1	/	4	1	/	0	0					



APPENDIX D

LEVEL OF SERVICE WORKSHEETS

EXISTING

Brown Strauss Banning Industrial Project

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

Scenario 1 Existing AM Peak Hour
10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.124	8.0	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.008	9.8	A
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Thru	0.978	33.6	D

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: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.124

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	46	7	37	39	9	16	30	8	6	47	32
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	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	46	7	37	39	9	16	30	8	6	47	32
Peak Hour Factor	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020
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]	3	14	2	12	12	3	5	9	2	2	15	10
Total Analysis Volume [veh/h]	14	57	9	46	49	11	20	37	10	7	59	40
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	696	743	665	746	811	854
Degree of Utilization, x	0.06	0.05	0.08	0.07	0.08	0.12

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.18	0.17	0.26	0.23	0.27	0.42
95th-Percentile Queue Length [ft]	4.57	4.26	6.47	5.72	6.73	10.58
Approach Delay [s/veh]	8.00		8.24		7.84	7.81
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	7.99					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	5	0	13	0	0	0	0	62	4	14	70	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	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	13	0	0	0	0	62	4	14	70	0
Peak Hour Factor	0.8710	1.0000	0.8710	1.0000	1.0000	1.0000	1.0000	0.8710	0.8710	0.8710	0.8710	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	0	0	0	0	18	1	4	20	0
Total Analysis Volume [veh/h]	6	0	15	0	0	0	0	71	5	16	80	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	0.01	0.00	0.02	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]	9.76	10.20	8.71	9.79	10.12	8.65	7.35	0.00	0.00	7.36	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	1.75	1.75	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.67	0.67
d_A, Approach Delay [s/veh]	9.01			9.52			0.00			1.23		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.59											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	33.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.978

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
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	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
Peak Hour Factor	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860
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	62	1	59	68	12	13	13	1	0	16	73
Total Analysis Volume [veh/h]	4	248	4	235	274	48	52	53	3	1	65	293
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	489	520	603	433	481	532
Degree of Utilization, x	0.52	0.98	0.08	0.25	0.14	0.55

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	2.98	13.10	0.26	0.97	0.47	3.31
95th-Percentile Queue Length [ft]	74.50	327.62	6.46	24.35	11.84	82.86
Approach Delay [s/veh]	18.11	55.57		14.06	16.35	
Approach LOS	C	F		B	C	
Intersection Delay [s/veh]	33.58					
Intersection LOS	D					

Brown Strauss Banning Industrial Project

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

Scenario 1 Existing PM Peak Hour
10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.093	7.8	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.006	9.5	A
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.552	12.4	B

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

Intersection Level Of Service Report
Intersection 1: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.093

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	4	44	7	37	28	10	17	38	6	6	38	24
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	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	44	7	37	28	10	17	38	6	6	38	24
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
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	13	2	11	8	3	5	11	2	2	11	7
Total Analysis Volume [veh/h]	5	52	8	44	33	12	20	45	7	7	45	29
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	719	756	666	763	827	867
Degree of Utilization, x	0.05	0.04	0.07	0.06	0.09	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.13	0.21	0.19	0.29	0.31
95th-Percentile Queue Length [ft]	3.55	3.36	5.35	4.63	7.13	7.71
Approach Delay [s/veh]	7.81		8.10		7.77	7.58
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	7.82					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	4	0	3	0	0	0	0	68	3	6	63	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	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	3	0	0	0	0	68	3	6	63	0
Peak Hour Factor	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	0	0	0	0	19	1	2	18	0
Total Analysis Volume [veh/h]	5	0	3	0	0	0	0	77	3	7	71	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	0.01	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]	9.53	9.98	8.68	9.51	9.95	8.61	7.33	0.00	0.00	7.36	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.70	0.70	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.29
d_A, Approach Delay [s/veh]	9.21			9.36			0.00			0.66		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.75											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
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	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
Peak Hour Factor	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130
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	0	59	24	9	11	10	1	1	9	54
Total Analysis Volume [veh/h]	2	88	0	237	97	37	43	42	4	5	37	215
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	593	605	736	569	594	680
Degree of Utilization, x	0.15	0.55	0.05	0.16	0.07	0.32

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.53	3.37	0.16	0.55	0.23	1.36
95th-Percentile Queue Length [ft]	13.31	84.16	3.96	13.79	5.69	33.89
Approach Delay [s/veh]	10.16	14.96		10.50	10.23	
Approach LOS	B	B		B	B	
Intersection Delay [s/veh]	12.43					
Intersection LOS	B					

OPENING YEAR CONDITIONS (2025)

Brown Strauss Banning Industrial Project

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

Scenario 2 Opening Year Conditions AM Peak Hour
10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.128	8.0	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.008	9.8	A
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Thru	1.032	39.7	E

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: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.128

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	46	7	37	39	9	16	30	8	6	47	32
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	48	7	38	41	9	17	31	8	6	49	33
Peak Hour Factor	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020
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]	3	15	2	12	13	3	5	10	2	2	15	10
Total Analysis Volume [veh/h]	14	60	9	47	51	11	21	39	10	7	61	41
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	694	740	663	742	807	850
Degree of Utilization, x	0.06	0.06	0.08	0.07	0.09	0.13

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.19	0.18	0.27	0.24	0.28	0.44
95th-Percentile Queue Length [ft]	4.76	4.45	6.69	5.93	7.10	10.98
Approach Delay [s/veh]	8.04		8.27		7.89	7.86
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	8.03					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	5	0	13	0	0	0	0	62	4	14	70	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	14	0	0	0	0	65	4	15	73	0
Peak Hour Factor	0.8710	1.0000	0.8710	1.0000	1.0000	1.0000	1.0000	0.8710	0.8710	0.8710	0.8710	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	0	0	0	0	19	1	4	21	0
Total Analysis Volume [veh/h]	6	0	16	0	0	0	0	75	5	17	84	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	0.01	0.00	0.02	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]	9.84	10.27	8.74	9.88	10.19	8.67	7.36	0.00	0.00	7.37	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.71
d_A, Approach Delay [s/veh]	9.04			9.58			0.00			1.24		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.60											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	39.7
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.032

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	203	3	192	224	40	43	44	2	1	53	239
Peak Hour Factor	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860
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	65	1	61	71	13	14	14	1	0	17	76
Total Analysis Volume [veh/h]	4	258	4	244	285	51	55	56	3	1	67	304
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	491	529	592	437	481	531
Degree of Utilization, x	0.54	1.03	0.09	0.26	0.14	0.57

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.19	15.16	0.28	1.03	0.49	3.57
95th-Percentile Queue Length [ft]	79.70	379.03	7.04	25.84	12.22	89.14
Approach Delay [s/veh]	18.68	68.88		14.13	16.92	
Approach LOS	C	F		B	C	
Intersection Delay [s/veh]	39.66					
Intersection LOS	E					

Brown Strauss Banning Industrial Project

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

Scenario 2 Opening Year Conditions PM Peak Hour
10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.099	7.9	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.006	9.6	A
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.581	13.0	B

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

Intersection Level Of Service Report
Intersection 1: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	4	44	7	37	28	10	17	38	6	6	38	24
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	46	7	38	29	10	18	40	6	6	40	25
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
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	14	2	11	9	3	5	12	2	2	12	7
Total Analysis Volume [veh/h]	5	55	8	45	34	12	21	48	7	7	48	30
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	716	752	663	759	823	862
Degree of Utilization, x	0.05	0.05	0.07	0.06	0.09	0.10

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.15	0.14	0.22	0.19	0.30	0.33
95th-Percentile Queue Length [ft]	3.73	3.55	5.51	4.77	7.61	8.17
Approach Delay [s/veh]	7.85		8.14		7.82	7.63
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	7.87					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	4	0	3	0	0	0	0	68	3	6	63	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	3	0	0	0	0	71	3	6	66	0
Peak Hour Factor	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	0	0	0	0	20	1	2	19	0
Total Analysis Volume [veh/h]	5	0	3	0	0	0	0	80	3	7	74	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	0.01	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]	9.57	10.01	8.70	9.55	9.98	8.62	7.34	0.00	0.00	7.37	0.00	0.00
Movement LOS	A	B	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.71	0.71	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.29
d_A, Approach Delay [s/veh]	9.24			9.39			0.00			0.64		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.73											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	83	0	225	93	35	41	40	4	5	35	204
Peak Hour Factor	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130
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	23	0	62	25	10	11	11	1	1	10	56
Total Analysis Volume [veh/h]	2	91	0	246	102	38	45	44	4	5	38	223
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	585	599	728	561	587	670
Degree of Utilization, x	0.16	0.58	0.05	0.17	0.07	0.33

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.56	3.72	0.17	0.59	0.24	1.46
95th-Percentile Queue Length [ft]	14.06	92.92	4.13	14.76	5.91	36.43
Approach Delay [s/veh]	10.32	15.83		10.69	10.50	
Approach LOS	B	C		B	B	
Intersection Delay [s/veh]	12.96					
Intersection LOS	B					

OPENING YEAR CONDITIONS WITH PROJECT (2025)

Brown Strauss Banning Industrial Project

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

Scenario 4 Opening Year Conditions With Project AM Peak Hour

Report File: G:\...\AMOYP.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.145	8.2	A
2	Project West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.009	7.4	A
3	Project Central-West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	9.4	A
4	Project Central-East Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	9.4	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.007	10.0	B
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Thru	1.041	40.4	E

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: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.145

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	46	7	37	39	9	16	30	8	6	47	32
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	15	0	0	0	0	0	0	0	11
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]	11	48	7	53	41	9	17	31	8	6	49	44
Peak Hour Factor	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020
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]	3	15	2	17	13	3	5	10	2	2	15	14
Total Analysis Volume [veh/h]	14	60	9	66	51	11	21	39	10	7	61	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	687	731	650	734	794	848
Degree of Utilization, x	0.06	0.06	0.10	0.08	0.09	0.15

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.19	0.18	0.34	0.28	0.29	0.51
95th-Percentile Queue Length [ft]	4.82	4.51	8.43	6.90	7.22	12.65
Approach Delay [s/veh]	8.10		8.47		7.97	7.96
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	8.15					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 2: Project West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	7.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	66	75	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	13	2	11	9
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	13	71	89	9
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	19	23	2
Total Analysis Volume [veh/h]	0	0	14	75	94	9
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	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.59	8.74	7.41	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.59	0.59	0.00	0.00
d_A, Approach Delay [s/veh]	9.17		1.17		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.54					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Central-West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	66	75	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	3	2	0	17	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]	1	3	2	69	95	1
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	1	18	25	0
Total Analysis Volume [veh/h]	1	3	2	73	100	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.43	8.77	7.40	0.00	0.00	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]	0.33	0.33	0.08	0.08	0.00	0.00
d_A, Approach Delay [s/veh]	8.93		0.20		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.28					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Project Central-East Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	66	75	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	1	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	0	70	95	0
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	0	18	25	0
Total Analysis Volume [veh/h]	1	1	0	74	100	0
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]	9.40	8.76	7.39	0.00	0.00	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]	0.17	0.17	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.08		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.10					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	5	0	13	0	0	0	0	62	4	14	70	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	5	0	7	0	2	0	0	10	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]	5	0	14	5	0	7	0	67	4	15	83	0
Peak Hour Factor	0.8710	1.0000	0.8710	1.0000	1.0000	1.0000	1.0000	0.8710	0.8710	0.8710	0.8710	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	1	0	2	0	19	1	4	24	0
Total Analysis Volume [veh/h]	6	0	16	5	0	7	0	77	5	17	95	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	0.01	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.00	10.36	8.75	10.04	10.34	8.78	7.38	0.00	0.00	7.37	0.00	0.00
Movement LOS	A	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	0.04	0.04	0.04	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	1.87	1.87	1.87	1.08	1.08	1.08	0.00	0.00	0.00	0.71	0.71	0.71
d_A, Approach Delay [s/veh]	9.09			9.31			0.00			1.12		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.92											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	40.4
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.041

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	10	7	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	203	3	192	224	50	50	44	2	1	53	239
Peak Hour Factor	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860
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	65	1	61	71	16	16	14	1	0	17	76
Total Analysis Volume [veh/h]	4	258	4	244	285	64	64	56	3	1	67	304
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	487	529	587	436	478	528
Degree of Utilization, x	0.55	1.04	0.11	0.28	0.14	0.58

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.24	15.44	0.37	1.15	0.49	3.62
95th-Percentile Queue Length [ft]	80.92	386.09	9.13	28.70	12.32	90.41
Approach Delay [s/veh]	18.96	70.01		14.50	17.14	
Approach LOS	C	F		B	C	
Intersection Delay [s/veh]	40.41					
Intersection LOS	E					

Brown Strauss Banning Industrial Project

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

Scenario 4 Opening Year Conditions With Project PM Peak Hour

Report File: G:\...\PMOYP.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.105	7.9	A
2	Project West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.003	7.4	A
3	Project Central-West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	9.3	A
4	Project Central-East Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	WB Thru	0.001	0.0	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.006	9.6	A
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.582	13.0	B

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

Intersection Level Of Service Report
Intersection 1: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.105

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	4	44	7	37	28	10	17	38	6	6	38	24
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	5	0	0	0	0	0	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	46	7	43	29	10	18	40	6	6	40	30
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
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	14	2	13	9	3	5	12	2	2	12	9
Total Analysis Volume [veh/h]	5	55	8	51	34	12	21	48	7	7	48	36
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	713	749	661	756	819	865
Degree of Utilization, x	0.05	0.05	0.08	0.06	0.09	0.11

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.15	0.14	0.25	0.19	0.31	0.35
95th-Percentile Queue Length [ft]	3.75	3.56	6.25	4.85	7.65	8.79
Approach Delay [s/veh]	7.87		8.21		7.85	7.65
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	7.90					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 2: Project West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	7.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	71	67	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	5	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	5	74	75	4
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	1	19	20	1
Total Analysis Volume [veh/h]	0	0	5	78	79	4
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]	9.37	8.66	7.36	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.21	0.21	0.00	0.00
d_A, Approach Delay [s/veh]	9.02		0.44		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.22					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Central-West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	71	67	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	3	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	3	0	74	76	0
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	0	19	20	0
Total Analysis Volume [veh/h]	1	3	0	78	80	0
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]	9.31	8.67	7.35	0.00	0.00	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]	0.32	0.32	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.83		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.22					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Project Central-East Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	71	67	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	75	76	0
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	0	20	20	0
Total Analysis Volume [veh/h]	0	0	0	79	80	0
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]	9.30	8.65	7.35	0.00	0.00	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]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.98		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	4	0	3	0	0	0	0	68	3	6	63	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	1	0	2	0	1	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	3	1	0	2	0	72	3	6	70	0
Peak Hour Factor	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	0	0	1	0	20	1	2	20	0
Total Analysis Volume [veh/h]	5	0	3	1	0	2	0	81	3	7	79	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	0.01	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]	9.63	10.05	8.70	9.61	10.04	8.66	7.35	0.00	0.00	7.37	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.71	0.71	0.71	0.25	0.25	0.25	0.00	0.00	0.00	0.29	0.29	0.29
d_A, Approach Delay [s/veh]	9.28			8.98			0.00			0.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.84											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.582

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	4	2	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	83	0	225	93	39	43	40	4	5	35	204
Peak Hour Factor	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130
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	23	0	62	25	11	12	11	1	1	10	56
Total Analysis Volume [veh/h]	2	91	0	246	102	43	47	44	4	5	38	223
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	584	599	726	560	586	669
Degree of Utilization, x	0.16	0.58	0.06	0.17	0.07	0.33

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.56	3.73	0.19	0.61	0.24	1.46
95th-Percentile Queue Length [ft]	14.10	93.19	4.71	15.17	5.92	36.57
Approach Delay [s/veh]	10.34	15.78		10.74	10.53	
Approach LOS	B	C		B	B	
Intersection Delay [s/veh]	12.96					
Intersection LOS	B					

Brown Strauss Banning Industrial Project

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

Scenario 5 Opening Year Conditions With Project AM Peak Hour - With Improvements

Report File: G:\...\AMOYPI.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Thru	0.643	17.6	C

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 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	17.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.643

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	10	7	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	203	3	192	224	50	50	44	2	1	53	239
Peak Hour Factor	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860
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	65	1	61	71	16	16	14	1	0	17	76
Total Analysis Volume [veh/h]	4	258	4	244	285	64	64	56	3	1	67	304
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	501	495	543	451	490	543
Degree of Utilization, x	0.53	0.49	0.64	0.27	0.14	0.56

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.07	2.68	4.55	1.10	0.48	3.42
95th-Percentile Queue Length [ft]	76.65	67.10	113.63	27.39	11.98	85.52
Approach Delay [s/veh]	17.98	18.98		13.95	16.29	
Approach LOS	C	C		B	C	
Intersection Delay [s/veh]	17.59					
Intersection LOS	C					

Brown Strauss Banning Industrial Project

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

Scenario 5 Opening Year Conditions With Project PM Peak Hour - With Improvements

Report File: G:\...\PMOYPI.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.420	11.1	B

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

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.420

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	4	2	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	83	0	225	93	39	43	40	4	5	35	204
Peak Hour Factor	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130
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	23	0	62	25	11	12	11	1	1	10	56
Total Analysis Volume [veh/h]	2	91	0	246	102	43	47	44	4	5	38	223
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	591	586	662	572	594	680
Degree of Utilization, x	0.16	0.42	0.22	0.17	0.07	0.33

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.55	2.07	0.83	0.59	0.23	1.43
95th-Percentile Queue Length [ft]	13.87	51.79	20.76	14.81	5.84	35.77
Approach Delay [s/veh]	10.22	11.90		10.55	10.35	
Approach LOS	B	B		B	B	
Intersection Delay [s/veh]	11.08					
Intersection LOS	B					

CUMULATIVE CONDITIONS (2025)

Brown Strauss Banning Industrial Project

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

Scenario 6 Cumulative Conditions AM Peak Hour
10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.144	8.3	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.008	10.1	B
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Thru	1.052	41.5	E

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: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-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):	0.144

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	46	7	37	39	9	16	30	8	6	47	32
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	26	1	1	1	5	0	0	1	8
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]	11	49	7	64	42	10	18	36	8	6	50	41
Peak Hour Factor	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020
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]	3	15	2	20	13	3	6	11	2	2	16	13
Total Analysis Volume [veh/h]	14	61	9	80	52	12	22	45	10	7	62	51
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	682	726	649	732	786	835
Degree of Utilization, x	0.06	0.06	0.12	0.09	0.10	0.14

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.20	0.18	0.42	0.29	0.32	0.50
95th-Percentile Queue Length [ft]	4.91	4.60	10.49	7.16	8.11	12.52
Approach Delay [s/veh]	8.15		8.61		8.08	8.03
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	8.26					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	5	0	13	0	0	0	0	62	4	14	70	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	9	0	0	21	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]	5	0	14	0	0	0	0	74	4	15	94	0
Peak Hour Factor	0.8710	1.0000	0.8710	1.0000	1.0000	1.0000	1.0000	0.8710	0.8710	0.8710	0.8710	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	0	0	0	0	21	1	4	27	0
Total Analysis Volume [veh/h]	6	0	16	0	0	0	0	85	5	17	108	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	0.01	0.00	0.02	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]	10.09	10.51	8.79	10.14	10.43	8.78	7.41	0.00	0.00	7.39	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	1.90	1.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.71
d_A, Approach Delay [s/veh]	9.15			9.78			0.00			1.01		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.38											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	41.5
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.052

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	1	1	19	6	3	0	0	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]	3	204	3	193	225	59	49	47	2	1	55	240
Peak Hour Factor	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860
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	65	1	61	72	19	16	15	1	0	17	76
Total Analysis Volume [veh/h]	4	260	4	246	286	75	62	60	3	1	70	305
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	485	532	583	435	476	525
Degree of Utilization, x	0.55	1.05	0.13	0.29	0.15	0.58

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.31	15.86	0.44	1.18	0.52	3.67
95th-Percentile Queue Length [ft]	82.64	396.61	10.99	29.43	13.00	91.64
Approach Delay [s/veh]	19.22	71.98		14.61	17.28	
Approach LOS	C	F		B	C	
Intersection Delay [s/veh]	41.55					
Intersection LOS	E					

Brown Strauss Banning Industrial Project

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

Scenario 6 Cumulative Conditions PM Peak Hour
10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.137	8.0	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.007	9.8	A
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.597	13.3	B

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

Intersection Level Of Service Report
Intersection 1: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.137

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	4	44	7	37	28	10	17	38	6	6	38	24
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	11	1	1	1	2	0	0	5	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	47	7	49	30	11	19	42	6	6	45	50
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
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	14	2	15	9	3	6	12	2	2	13	15
Total Analysis Volume [veh/h]	5	56	8	58	36	13	23	50	7	7	53	59
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	701	735	652	745	806	870
Degree of Utilization, x	0.05	0.05	0.09	0.07	0.10	0.14

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.15	0.15	0.29	0.21	0.33	0.47
95th-Percentile Queue Length [ft]	3.87	3.69	7.30	5.27	8.23	11.83
Approach Delay [s/veh]	7.97		8.36		7.96	7.80
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	8.02					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	4	0	3	0	0	0	0	68	3	6	63	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	21	0	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	3	0	0	0	0	92	3	6	77	0
Peak Hour Factor	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	0	0	0	0	26	1	2	22	0
Total Analysis Volume [veh/h]	5	0	3	0	0	0	0	104	3	7	87	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	0.01	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]	9.83	10.26	8.82	9.81	10.22	8.68	7.37	0.00	0.00	7.41	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.74	0.74	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.29
d_A, Approach Delay [s/veh]	9.45			9.57			0.00			0.55		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.61											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	1	1	8	19	2	0	0	3	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]	2	84	0	226	94	43	60	42	4	5	38	205
Peak Hour Factor	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130
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	23	0	62	26	12	16	12	1	1	10	56
Total Analysis Volume [veh/h]	2	92	0	248	103	47	66	46	4	5	42	225
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	571	589	712	553	578	658
Degree of Utilization, x	0.16	0.60	0.07	0.21	0.08	0.34

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.59	3.92	0.21	0.78	0.26	1.52
95th-Percentile Queue Length [ft]	14.63	97.96	5.29	19.62	6.61	37.91
Approach Delay [s/veh]	10.54	16.35		11.23	10.73	
Approach LOS	B	C		B	B	
Intersection Delay [s/veh]	13.32					
Intersection LOS	B					

CUMULATIVE CONDITIONS WITH PROJECT (2025)

Brown Strauss Banning Industrial Project

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

Scenario 8 Cumulative Conditions With Project AM Peak Hour

Report File: G:\...\AMCUMW.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.161	8.4	A
2	Project West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.009	7.5	A
3	Project Central-West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	9.6	A
4	Project Central-East Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	9.6	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.007	10.3	B
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Thru	1.061	42.3	E

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: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-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):	0.161

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	46	7	37	39	9	16	30	8	6	47	32
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	41	1	1	1	5	0	0	1	19
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]	11	49	7	79	42	10	18	36	8	6	50	52
Peak Hour Factor	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020	0.8020
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]	3	15	2	25	13	3	6	11	2	2	16	16
Total Analysis Volume [veh/h]	14	61	9	99	52	12	22	45	10	7	62	65
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	674	717	644	726	775	832
Degree of Utilization, x	0.06	0.06	0.15	0.09	0.10	0.16

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.20	0.19	0.54	0.29	0.33	0.57
95th-Percentile Queue Length [ft]	4.97	4.66	13.51	7.22	8.25	14.31
Approach Delay [s/veh]	8.21		8.84		8.16	8.16
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	8.41					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 2: Project West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	7.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	66	75	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	13	11	32	9
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	13	80	110	9
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	21	29	2
Total Analysis Volume [veh/h]	0	0	14	84	116	9
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	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.78	8.84	7.46	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.59	0.59	0.00	0.00
d_A, Approach Delay [s/veh]	9.31		1.07		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.47					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Central-West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	66	75	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	3	2	9	38	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]	1	3	2	78	116	1
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	1	21	31	0
Total Analysis Volume [veh/h]	1	3	2	82	122	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.61	8.87	7.44	0.00	0.00	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]	0.34	0.34	0.08	0.08	0.00	0.00
d_A, Approach Delay [s/veh]	9.06		0.18		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.24					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Project Central-East Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	66	75	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	10	38	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	0	79	116	0
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	0	21	31	0
Total Analysis Volume [veh/h]	1	1	0	83	122	0
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]	9.58	8.86	7.44	0.00	0.00	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]	0.18	0.18	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.22		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.09					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	5	0	13	0	0	0	0	62	4	14	70	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	5	0	7	0	11	0	0	31	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]	5	0	14	5	0	7	0	76	4	15	104	0
Peak Hour Factor	0.8710	1.0000	0.8710	1.0000	1.0000	1.0000	1.0000	0.8710	0.8710	0.8710	0.8710	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	4	1	0	2	0	22	1	4	30	0
Total Analysis Volume [veh/h]	6	0	16	5	0	7	0	87	5	17	119	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	0.01	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.26	10.60	8.80	10.31	10.58	8.90	7.43	0.00	0.00	7.39	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.08	0.04	0.04	0.04	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	1.92	1.92	1.92	1.12	1.12	1.12	0.00	0.00	0.00	0.71	0.71	0.71
d_A, Approach Delay [s/veh]	9.20			9.49			0.00			0.92		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.69											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	42.3
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.061

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	1	1	29	13	3	0	0	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]	3	204	3	193	225	69	56	47	2	1	55	240
Peak Hour Factor	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860
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	65	1	61	72	22	18	15	1	0	17	76
Total Analysis Volume [veh/h]	4	260	4	246	286	88	71	60	3	1	70	305
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	481	532	578	433	473	522
Degree of Utilization, x	0.56	1.06	0.15	0.31	0.15	0.58

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.36	16.15	0.53	1.30	0.52	3.72
95th-Percentile Queue Length [ft]	83.92	403.86	13.35	32.50	13.10	92.94
Approach Delay [s/veh]	19.52	73.19		15.00	17.51	
Approach LOS	C	F		C	C	
Intersection Delay [s/veh]	42.35					
Intersection LOS	E					

Brown Strauss Banning Industrial Project

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

Scenario 8 Cumulative Conditions With Project PM Peak Hour

Report File: G:\...\PMCUMW.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	22nd St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.144	8.1	A
2	Project West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	EB Left	0.003	7.4	A
3	Project Central-West Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	SB Left	0.001	9.5	A
4	Project Central-East Dwy (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	EB Thru	0.001	0.0	A
5	Project East Dwy/12th St (NS) at Lincoln St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.007	9.9	A
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.597	13.3	B

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

Intersection Level Of Service Report
Intersection 1: 22nd St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.144

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]	35.00			35.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	4	44	7	37	28	10	17	38	6	6	38	24
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	16	1	1	1	2	0	0	5	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	47	7	54	30	11	19	42	6	6	45	55
Peak Hour Factor	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420	0.8420
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	14	2	16	9	3	6	12	2	2	13	16
Total Analysis Volume [veh/h]	5	56	8	64	36	13	23	50	7	7	53	65
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	698	732	649	742	802	869
Degree of Utilization, x	0.05	0.05	0.10	0.07	0.10	0.14

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.16	0.15	0.33	0.21	0.33	0.50
95th-Percentile Queue Length [ft]	3.89	3.71	8.16	5.29	8.28	12.53
Approach Delay [s/veh]	7.99		8.43		7.99	7.84
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	8.07					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 2: Project West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	7.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	71	67	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	21	16	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	5	95	86	4
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	1	25	23	1
Total Analysis Volume [veh/h]	0	0	5	100	91	4
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]	9.57	8.71	7.39	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.21	0.21	0.00	0.00
d_A, Approach Delay [s/veh]	9.14		0.35		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.18					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: Project Central-West Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	71	67	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	3	0	21	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	3	0	95	87	0
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	0	25	23	0
Total Analysis Volume [veh/h]	1	3	0	100	92	0
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]	9.51	8.73	7.38	0.00	0.00	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]	0.33	0.33	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.92		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.18					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Project Central-East Dwy (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	71	67	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	22	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	96	87	0
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	0	25	23	0
Total Analysis Volume [veh/h]	0	0	0	101	92	0
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]	9.50	8.71	7.38	0.00	0.00	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]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.10		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 5: Project East Dwy/12th St (NS) at Lincoln St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

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			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	4	0	3	0	0	0	0	68	3	6	63	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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
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	1	0	2	0	22	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	3	1	0	2	0	93	3	6	81	0
Peak Hour Factor	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	0	0	1	0	26	1	2	23	0
Total Analysis Volume [veh/h]	5	0	3	1	0	2	0	105	3	7	91	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	0.01	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]	9.89	10.29	8.82	9.86	10.27	8.72	7.37	0.00	0.00	7.42	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.75	0.75	0.75	0.26	0.26	0.26	0.00	0.00	0.00	0.29	0.29	0.29
d_A, Approach Delay [s/veh]	9.49			9.10			0.00			0.53		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.71											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	1	1	12	21	2	0	0	3	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]	2	84	0	226	94	47	62	42	4	5	38	205
Peak Hour Factor	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130
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	23	0	62	26	13	17	12	1	1	10	56
Total Analysis Volume [veh/h]	2	92	0	248	103	51	68	46	4	5	42	225
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	570	588	710	552	577	657
Degree of Utilization, x	0.16	0.60	0.07	0.21	0.08	0.34

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.59	3.93	0.23	0.80	0.27	1.52
95th-Percentile Queue Length [ft]	14.66	98.24	5.78	20.08	6.63	38.04
Approach Delay [s/veh]	10.56	16.32		11.28	10.75	
Approach LOS	B	C		B	B	
Intersection Delay [s/veh]	13.33					
Intersection LOS	B					

Brown Strauss Banning Industrial Project

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

Scenario 9 Cumulative Conditions With Project AM Peak Hour - With Improvements

Report File: G:\...\AMCUMWI.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Thru	0.696	18.8	C

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 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	3	195	3	185	215	38	41	42	2	1	51	230
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	1	1	29	13	3	0	0	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]	3	204	3	193	225	69	56	47	2	1	55	240
Peak Hour Factor	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860	0.7860
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	65	1	61	72	22	18	15	1	0	17	76
Total Analysis Volume [veh/h]	4	260	4	246	286	88	71	60	3	1	70	305
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	491	488	537	444	481	533
Degree of Utilization, x	0.54	0.50	0.70	0.30	0.15	0.57

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.22	2.79	5.43	1.26	0.51	3.57
95th-Percentile Queue Length [ft]	80.49	69.79	135.69	31.40	12.85	89.28
Approach Delay [s/veh]	18.73	20.95		14.57	16.87	
Approach LOS	C	C		B	C	
Intersection Delay [s/veh]	18.82					
Intersection LOS	C					

Brown Strauss Banning Industrial Project

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

Scenario 9 Cumulative Conditions With Project PM Peak Hour - With Improvements

Report File: G:\...\PMCUMWI.pdf

10/13/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	8th St (NS) at Lincoln St (EW)	All-way stop	HCM 7th Edition	SB Left	0.431	11.4	B

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

Intersection Level Of Service Report
Intersection 6: 8th St (NS) at Lincoln St (EW)

Control Type:	All-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.431

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	1	0	0	0	0	0	1
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]	40.00			40.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	2	80	0	216	89	34	39	38	4	5	34	196
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	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	1	1	12	21	2	0	0	3	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]	2	84	0	226	94	47	62	42	4	5	38	205
Peak Hour Factor	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130	0.9130
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	23	0	62	26	13	17	12	1	1	10	56
Total Analysis Volume [veh/h]	2	92	0	248	103	51	68	46	4	5	42	225
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	578	575	652	564	585	668
Degree of Utilization, x	0.16	0.43	0.24	0.21	0.08	0.34

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.58	2.16	0.91	0.78	0.26	1.49
95th-Percentile Queue Length [ft]	14.42	53.94	22.84	19.57	6.53	37.14
Approach Delay [s/veh]	10.43	12.19		11.07	10.57	
Approach LOS	B	B		B	B	
Intersection Delay [s/veh]	11.36					
Intersection LOS	B					

APPENDIX E

EXISTING FACILITY TRIP GENERATION WORKSHEETS

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, March 07, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	IN 1	2	3	4	5	6	TOTAL	PM Time	IN 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	0	0	0	2	0	0	2
0:15	0	0	0	0	0	0	0	12:15	0	0	0	0	0	0	0
0:30	0	0	0	0	0	0	0	12:30	0	0	0	1	0	0	1
0:45	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	13:00	1	0	0	1	0	0	2
1:15	0	0	0	0	0	0	0	13:15	1	0	0	2	0	0	3
1:30	0	0	0	0	0	0	0	13:30	1	0	0	0	0	0	1
1:45	0	0	0	0	0	0	0	13:45	2	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	14:00	2	0	0	0	0	0	2
2:15	0	0	0	0	0	0	0	14:15	3	0	0	0	0	0	3
2:30	0	0	0	0	0	0	0	14:30	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	14:45	1	1	0	0	0	0	2
3:00	0	0	0	0	0	0	0	15:00	2	0	0	0	0	0	2
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	1	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	0	0	0	0	0	0
4:30	11	0	0	0	0	0	11	16:30	0	0	0	0	0	0	0
4:45	6	0	0	2	0	0	8	16:45	0	0	0	0	0	0	0
5:00	1	0	0	4	0	0	5	17:00	0	0	0	0	0	0	0
5:15	0	0	0	0	0	0	0	17:15	0	0	0	1	0	0	1
5:30	0	0	0	2	0	0	2	17:30	0	0	0	1	0	0	1
5:45	0	0	0	1	0	0	1	17:45	0	0	0	0	0	0	0
6:00	1	0	0	2	0	0	3	18:00	0	0	0	0	0	0	0
6:15	1	1	0	1	0	0	3	18:15	0	0	0	1	0	0	1
6:30	0	0	0	0	0	0	0	18:30	0	0	0	0	0	0	0
6:45	1	0	0	0	0	0	1	18:45	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	19:00	1	0	0	1	0	0	2
7:15	0	0	0	2	0	0	2	19:15	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	19:30	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	19:45	0	0	0	0	0	0	0
8:00	0	1	0	0	0	0	1	20:00	1	0	0	0	0	0	1
8:15	0	0	0	0	0	0	0	20:15	1	0	0	0	0	0	1
8:30	1	0	1	0	0	0	2	20:30	0	0	0	0	0	0	0
8:45	0	1	0	3	0	0	4	20:45	0	0	0	0	0	0	0
9:00	0	1	0	0	0	0	1	21:00	0	0	0	1	0	0	1
9:15	1	0	0	0	0	0	1	21:15	1	0	0	0	0	0	1
9:30	1	0	0	0	0	0	1	21:30	0	0	0	0	0	0	0
9:45	2	1	0	0	0	0	3	21:45	0	0	0	0	0	0	0
10:00	2	0	0	1	0	0	3	22:00	0	0	0	0	0	0	0
10:15	1	1	0	1	0	0	3	22:15	0	0	0	0	0	0	0
10:30	1	0	0	1	0	0	2	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	1	0	0	0	0	0	1	23:00	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	23:15	0	0	0	0	0	0	0
11:30	3	0	0	0	0	0	3	23:30	0	0	0	0	0	0	0
11:45	0	0	0	1	0	0	1	23:45	0	0	0	0	0	0	0
TOTAL	37	6	1	21	0	0	65	TOTAL	18	1	0	11	0	0	30

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	27

AM PEAK HOUR	1:30 PM
AM PEAK VOLUME	8

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	55	7	1	32	0	0	95
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	57.9%	7.4%	1.1%	33.7%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	111	16	2	65	0	0	194
CLASS 6	Buses	% OF TOTAL	57.2%	8.2%	1.0%	33.5%	0.0%	0.0%	100.0%

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, March 07, 2023
JOB #: SC3845
CITY: Fontana
LOCATION: CLASS1 DWY1 north of Jurupa.

AM	OUT							PM	OUT						
TIME	1	2	3	4	5	6	TOTAL	Time	1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	1	0	0	0	0	0	1
0:15	0	0	0	0	0	0	0	12:15	0	1	0	0	0	0	1
0:30	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0
0:45	1	0	0	0	0	0	1	12:45	1	0	0	1	0	0	2
1:00	0	0	0	0	0	0	0	13:00	1	0	0	1	0	0	2
1:15	4	0	0	0	0	0	4	13:15	0	0	0	2	0	0	2
1:30	2	0	0	0	0	0	2	13:30	0	0	0	0	0	0	0
1:45	4	0	0	0	0	0	4	13:45	0	0	0	1	0	0	1
2:00	0	0	0	0	0	0	0	14:00	15	0	0	1	0	0	16
2:15	0	0	0	0	0	0	0	14:15	1	0	0	1	0	0	2
2:30	0	0	0	0	0	0	0	14:30	0	1	0	0	0	0	1
2:45	0	0	0	0	0	0	0	14:45	1	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	15:00	2	1	0	0	0	0	3
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	16:15	0	0	0	0	0	0	0
4:30	0	0	0	0	0	0	0	16:30	2	0	0	0	0	0	2
4:45	1	0	0	0	0	0	1	16:45	0	0	0	0	0	0	0
5:00	0	0	0	1	0	0	1	17:00	0	0	0	0	0	0	0
5:15	0	0	0	2	0	0	2	17:15	0	0	0	0	0	0	0
5:30	0	0	1	4	0	0	5	17:30	0	0	0	1	0	0	1
5:45	1	0	0	0	0	0	1	17:45	1	0	0	0	0	0	1
6:00	0	0	0	1	0	0	1	18:00	0	1	0	1	0	0	2
6:15	0	0	0	0	0	0	0	18:15	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	18:30	0	0	0	0	0	0	0
6:45	0	0	0	4	0	0	4	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	0	0	0	1	0	0	1
7:15	1	0	0	0	0	0	1	19:15	0	0	0	1	0	0	1
7:30	0	0	0	0	0	0	0	19:30	0	0	0	0	0	0	0
7:45	0	0	0	2	0	0	2	19:45	0	0	0	0	0	0	0
8:00	0	1	0	0	0	0	1	20:00	2	0	0	0	0	0	2
8:15	1	0	0	0	0	0	1	20:15	0	0	0	0	0	0	0
8:30	0	0	0	1	0	0	1	20:30	0	0	0	0	0	0	0
8:45	1	1	0	0	0	0	2	20:45	0	0	0	0	0	0	0
9:00	0	0	0	1	0	0	1	21:00	0	0	0	0	0	0	0
9:15	1	1	0	1	0	0	3	21:15	0	0	0	1	0	0	1
9:30	2	0	0	0	0	0	2	21:30	0	0	0	0	0	0	0
9:45	0	1	0	1	0	0	2	21:45	0	0	0	0	0	0	0
10:00	0	1	0	0	0	0	1	22:00	0	0	0	0	0	0	0
10:15	1	0	0	0	0	0	1	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	1	0	0	1	23:00	1	0	0	0	0	0	1
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	2	0	0	0	0	0	2	23:30	0	0	0	0	0	0	0
11:45	1	0	0	1	0	0	2	23:45	3	0	0	0	0	0	3
TOTAL	25	5	1	21	0	0	52	TOTAL	31	4	0	12	0	0	47
				AM PEAK HOUR			1:15 AM					AM PEAK HOUR			2:00 PM
				AM PEAK VOLUME			10					AM PEAK VOLUME			20

TOTAL: AM+PM	56	9	1	33	0	0	99
% OF TOTAL	56.6%	9.1%	1.0%	33.3%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, March 07, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM	COMBINED							PM	COMBINED						
TIME	1	2	3	4	5	6	TOTAL	Time	1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	1	0	0	2	0	0	3
0:15	0	0	0	0	0	0	0	12:15	0	1	0	0	0	0	1
0:30	0	0	0	0	0	0	0	12:30	0	0	0	1	0	0	1
0:45	1	0	0	0	0	0	1	12:45	1	0	0	1	0	0	2
1:00	0	0	0	0	0	0	0	13:00	2	0	0	2	0	0	4
1:15	4	0	0	0	0	0	4	13:15	1	0	0	4	0	0	5
1:30	2	0	0	0	0	0	2	13:30	1	0	0	0	0	0	1
1:45	4	0	0	0	0	0	4	13:45	2	0	0	1	0	0	3
2:00	0	0	0	0	0	0	0	14:00	17	0	0	1	0	0	18
2:15	0	0	0	0	0	0	0	14:15	4	0	0	1	0	0	5
2:30	0	0	0	0	0	0	0	14:30	0	1	0	0	0	0	1
2:45	0	0	0	0	0	0	0	14:45	2	1	0	0	0	0	3
3:00	0	0	0	0	0	0	0	15:00	4	1	0	0	0	0	5
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	1	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	0	0	0	0	0	0
4:30	11	0	0	0	0	0	11	16:30	2	0	0	0	0	0	2
4:45	7	0	0	2	0	0	9	16:45	0	0	0	0	0	0	0
5:00	1	0	0	5	0	0	6	17:00	0	0	0	0	0	0	0
5:15	0	0	0	2	0	0	2	17:15	0	0	0	1	0	0	1
5:30	0	0	1	6	0	0	7	17:30	0	0	0	2	0	0	2
5:45	1	0	0	1	0	0	2	17:45	1	0	0	0	0	0	1
6:00	1	0	0	3	0	0	4	18:00	0	1	0	1	0	0	2
6:15	1	1	0	1	0	0	3	18:15	0	0	0	1	0	0	1
6:30	0	0	0	0	0	0	0	18:30	0	0	0	0	0	0	0
6:45	1	0	0	4	0	0	5	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	1	0	0	2	0	0	3
7:15	1	0	0	2	0	0	3	19:15	0	0	0	1	0	0	1
7:30	0	0	0	0	0	0	0	19:30	0	0	0	0	0	0	0
7:45	0	0	0	2	0	0	2	19:45	0	0	0	0	0	0	0
8:00	0	2	0	0	0	0	2	20:00	3	0	0	0	0	0	3
8:15	1	0	0	0	0	0	1	20:15	1	0	0	0	0	0	1
8:30	1	0	1	1	0	0	3	20:30	0	0	0	0	0	0	0
8:45	1	2	0	3	0	0	6	20:45	0	0	0	0	0	0	0
9:00	0	1	0	1	0	0	2	21:00	0	0	0	1	0	0	1
9:15	2	1	0	1	0	0	4	21:15	1	0	0	1	0	0	2
9:30	3	0	0	0	0	0	3	21:30	0	0	0	0	0	0	0
9:45	2	2	0	1	0	0	5	21:45	0	0	0	0	0	0	0
10:00	2	1	0	1	0	0	4	22:00	0	0	0	0	0	0	0
10:15	2	1	0	1	0	0	4	22:15	0	0	0	0	0	0	0
10:30	1	0	0	1	0	0	2	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	1	0	0	1	0	0	2	23:00	1	0	0	0	0	0	1
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	5	0	0	0	0	0	5	23:30	0	0	0	0	0	0	0
11:45	1	0	0	2	0	0	3	23:45	3	0	0	0	0	0	3
TOTAL	62	11	2	42	0	0	117	TOTAL	49	5	0	23	0	0	77

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	29

AM PEAK HOUR	2:00 PM
AM PEAK VOLUME	27

TOTAL: AM+PM	111	16	2	65	0	0	194
% OF TOTAL	57.2%	8.2%	1.0%	33.5%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	IN 1	2	3	4	5	6	TOTAL	PM Time	IN 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	1	0	0	1	0	0	2
0:15	0	0	0	0	0	0	0	12:15	0	0	0	1	0	0	1
0:30	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0
0:45	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	13:00	0	0	0	1	0	0	1
1:15	0	0	0	0	0	0	0	13:15	0	0	0	1	0	0	1
1:30	0	0	0	0	0	0	0	13:30	0	0	0	1	0	0	1
1:45	0	0	0	0	0	0	0	13:45	1	0	0	1	0	0	2
2:00	0	0	0	0	0	0	0	14:00	2	0	0	0	0	0	2
2:15	0	0	0	0	0	0	0	14:15	2	0	0	0	0	0	2
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	1	0	0	0	0	3
3:00	0	0	0	0	0	0	0	15:00	0	0	0	0	0	0	0
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	5	0	0	0	0	0	5	16:15	0	0	0	0	0	0	0
4:30	10	0	0	0	0	0	10	16:30	0	0	0	1	0	0	1
4:45	5	0	0	2	0	0	7	16:45	0	0	0	0	0	0	0
5:00	0	0	0	3	0	0	3	17:00	0	0	0	0	0	0	0
5:15	1	0	0	2	0	0	3	17:15	0	1	0	0	0	0	1
5:30	0	0	0	1	0	0	1	17:30	0	0	0	0	0	0	0
5:45	0	0	0	2	0	0	2	17:45	0	0	0	1	0	0	1
6:00	0	0	0	0	0	0	0	18:00	0	0	0	1	0	0	1
6:15	1	0	0	0	0	0	1	18:15	0	0	0	0	0	0	0
6:30	0	0	0	1	0	0	1	18:30	0	0	0	2	0	0	2
6:45	1	1	1	0	0	0	3	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	0	0	0	1	0	0	1
7:15	0	1	0	2	0	0	3	19:15	0	0	0	0	0	0	0
7:30	1	0	0	0	0	0	1	19:30	0	0	0	0	0	0	0
7:45	1	0	0	0	0	0	1	19:45	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	20:00	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	20:15	2	0	0	0	0	0	2
8:30	0	0	0	0	0	0	0	20:30	0	0	0	0	0	0	0
8:45	0	0	1	1	0	0	2	20:45	0	0	0	0	0	0	0
9:00	1	0	0	2	0	0	3	21:00	0	0	0	0	0	0	0
9:15	0	0	0	1	0	0	1	21:15	0	0	0	0	0	0	0
9:30	0	1	0	1	0	0	2	21:30	0	0	0	0	0	0	0
9:45	2	0	0	2	0	0	4	21:45	0	0	0	0	0	0	0
10:00	1	1	0	0	0	0	2	22:00	0	0	0	0	0	0	0
10:15	1	0	0	0	0	0	1	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	1	0	2	0	0	3	22:45	0	0	0	0	0	0	0
11:00	0	0	0	1	0	0	1	23:00	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	23:15	0	0	0	0	0	0	0
11:30	0	0	0	4	0	0	4	23:30	0	0	0	0	0	0	0
11:45	1	3	0	1	0	0	5	23:45	0	0	0	0	0	0	0
TOTAL	31	8	2	29	0	0	70	TOTAL	14	2	0	12	0	0	28
				AM PEAK HOUR			4:15 AM					AM PEAK HOUR			2:00 PM
				AM PEAK VOLUME			25					AM PEAK VOLUME			11

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	45	10	2	41	0	0	98
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	45.9%	10.2%	2.0%	41.8%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	89	24	3	82	0	0	198
CLASS 6	Buses	% OF TOTAL	44.9%	12.1%	1.5%	41.4%	0.0%	0.0%	100.0%

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023
JOB #: SC3845
CITY: Fontana
LOCATION: CLASS1 DWY1 north of Jurupa.

AM	OUT							PM	OUT						
TIME	1	2	3	4	5	6	TOTAL	Time	1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	1	0	0	0	0	0	1
0:15	2	0	0	0	0	0	2	12:15	0	0	0	4	0	0	4
0:30	3	0	0	0	0	0	3	12:30	0	0	0	1	0	0	1
0:45	0	0	0	0	0	0	0	12:45	0	0	0	2	0	0	2
1:00	0	0	0	0	0	0	0	13:00	0	0	0	0	0	0	0
1:15	0	0	0	0	0	0	0	13:15	0	1	0	1	0	0	2
1:30	0	0	0	0	0	0	0	13:30	10	0	0	0	0	0	10
1:45	0	0	0	0	0	0	0	13:45	6	0	0	1	0	0	7
2:00	0	0	0	0	0	0	0	14:00	1	0	0	0	0	0	1
2:15	0	0	0	0	0	0	0	14:15	1	0	0	0	0	0	1
2:30	0	0	0	0	0	0	0	14:30	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	14:45	0	1	0	0	0	0	1
3:00	0	0	0	0	0	0	0	15:00	0	1	0	0	0	0	1
3:15	0	0	0	0	0	0	0	15:15	1	1	0	0	0	0	2
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	16:15	1	0	0	0	0	0	1
4:30	0	0	0	0	0	0	0	16:30	3	0	0	0	0	0	3
4:45	0	0	0	0	0	0	0	16:45	0	0	0	0	0	0	0
5:00	0	0	0	1	0	0	1	17:00	0	0	0	0	0	0	0
5:15	0	0	0	3	0	0	3	17:15	1	1	0	0	0	0	2
5:30	0	0	0	2	0	0	2	17:30	0	0	0	0	0	0	0
5:45	1	0	0	0	0	0	1	17:45	0	0	0	1	0	0	1
6:00	0	0	0	1	0	0	1	18:00	0	0	0	0	0	0	0
6:15	0	0	0	4	0	0	4	18:15	0	0	0	1	0	0	1
6:30	0	0	0	0	0	0	0	18:30	0	0	0	1	0	0	1
6:45	0	0	0	0	0	0	0	18:45	0	0	0	1	0	0	1
7:00	0	0	0	1	0	0	1	19:00	0	0	0	0	0	0	0
7:15	0	1	0	1	0	0	2	19:15	0	0	0	0	0	0	0
7:30	0	1	0	2	0	0	3	19:30	0	0	0	0	0	0	0
7:45	0	0	0	1	0	0	1	19:45	0	0	0	2	0	0	2
8:00	0	0	0	0	0	0	0	20:00	0	0	0	0	0	0	0
8:15	1	0	0	0	0	0	1	20:15	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	20:30	0	0	0	0	0	0	0
8:45	0	0	0	1	0	0	1	20:45	0	0	0	0	0	0	0
9:00	1	1	1	0	0	0	3	21:00	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	21:15	0	0	0	0	0	0	0
9:30	1	0	0	2	0	0	3	21:30	0	0	0	0	0	0	0
9:45	0	1	0	1	0	0	2	21:45	0	0	0	0	0	0	0
10:00	1	2	0	2	0	0	5	22:00	0	0	0	0	0	0	0
10:15	0	1	0	0	0	0	1	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	1	0	0	1	23:00	1	0	0	0	0	0	1
11:15	0	0	0	3	0	0	3	23:15	0	0	0	0	0	0	0
11:30	2	0	0	0	0	0	2	23:30	4	0	0	0	0	0	4
11:45	0	2	0	0	0	0	2	23:45	1	0	0	0	0	0	1
TOTAL	13	9	1	26	0	0	49	TOTAL	31	5	0	15	0	0	51
				AM PEAK HOUR			9:30 AM					AM PEAK HOUR			1:15 PM
				AM PEAK VOLUME			11					AM PEAK VOLUME			20

TOTAL: AM+PM	44	14	1	41	0	0	100
% OF TOTAL	44.0%	14.0%	1.0%	41.0%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, March 08, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	COMBINED 1	2	3	4	5	6	TOTAL	PM Time	COMBINED 1	2	3	4	5	6	TOTAL
0:00	1	0	0	0	0	0	1	12:00	2	0	0	1	0	0	3
0:15	2	0	0	0	0	0	2	12:15	0	0	0	5	0	0	5
0:30	3	0	0	0	0	0	3	12:30	0	0	0	1	0	0	1
0:45	0	0	0	0	0	0	0	12:45	0	0	0	2	0	0	2
1:00	0	0	0	0	0	0	0	13:00	0	0	0	1	0	0	1
1:15	0	0	0	0	0	0	0	13:15	0	1	0	2	0	0	3
1:30	0	0	0	0	0	0	0	13:30	10	0	0	1	0	0	11
1:45	0	0	0	0	0	0	0	13:45	7	0	0	2	0	0	9
2:00	0	0	0	0	0	0	0	14:00	3	0	0	0	0	0	3
2:15	0	0	0	0	0	0	0	14:15	3	0	0	0	0	0	3
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	2	0	0	0	0	4
3:00	0	0	0	0	0	0	0	15:00	0	1	0	0	0	0	1
3:15	0	0	0	0	0	0	0	15:15	1	1	0	0	0	0	2
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	5	0	0	0	0	0	5	16:15	1	0	0	0	0	0	1
4:30	10	0	0	0	0	0	10	16:30	3	0	0	1	0	0	4
4:45	5	0	0	2	0	0	7	16:45	0	0	0	0	0	0	0
5:00	0	0	0	4	0	0	4	17:00	0	0	0	0	0	0	0
5:15	1	0	0	5	0	0	6	17:15	1	2	0	0	0	0	3
5:30	0	0	0	3	0	0	3	17:30	0	0	0	0	0	0	0
5:45	1	0	0	2	0	0	3	17:45	0	0	0	2	0	0	2
6:00	0	0	0	1	0	0	1	18:00	0	0	0	1	0	0	1
6:15	1	0	0	4	0	0	5	18:15	0	0	0	1	0	0	1
6:30	0	0	0	1	0	0	1	18:30	0	0	0	3	0	0	3
6:45	1	1	1	0	0	0	3	18:45	0	0	0	1	0	0	1
7:00	0	0	0	2	0	0	2	19:00	0	0	0	1	0	0	1
7:15	0	2	0	3	0	0	5	19:15	0	0	0	0	0	0	0
7:30	1	1	0	2	0	0	4	19:30	0	0	0	0	0	0	0
7:45	1	0	0	1	0	0	2	19:45	0	0	0	2	0	0	2
8:00	0	0	0	0	0	0	0	20:00	0	0	0	0	0	0	0
8:15	1	0	0	0	0	0	1	20:15	2	0	0	0	0	0	2
8:30	0	0	0	0	0	0	0	20:30	0	0	0	0	0	0	0
8:45	0	0	1	2	0	0	3	20:45	0	0	0	0	0	0	0
9:00	2	1	1	2	0	0	6	21:00	0	0	0	0	0	0	0
9:15	0	0	0	1	0	0	1	21:15	0	0	0	0	0	0	0
9:30	1	1	0	3	0	0	5	21:30	0	0	0	0	0	0	0
9:45	2	1	0	3	0	0	6	21:45	0	0	0	0	0	0	0
10:00	2	3	0	2	0	0	7	22:00	0	0	0	0	0	0	0
10:15	1	1	0	0	0	0	2	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	1	0	2	0	0	3	22:45	0	0	0	0	0	0	0
11:00	0	0	0	2	0	0	2	23:00	1	0	0	0	0	0	1
11:15	0	0	0	3	0	0	3	23:15	0	0	0	0	0	0	0
11:30	2	0	0	4	0	0	6	23:30	4	0	0	0	0	0	4
11:45	1	5	0	1	0	0	7	23:45	1	0	0	0	0	0	1
TOTAL	44	17	3	55	0	0	119	**TOTAL**	45	7	0	27	0	0	79

AM PEAK HOUR	4:30 AM
AM PEAK VOLUME	27

AM PEAK HOUR	1:30 PM
AM PEAK VOLUME	26

TOTAL: AM+PM	89	24	3	82	0	0	198
% OF TOTAL	44.9%	12.1%	1.5%	41.4%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM TIME	IN 1	2	3	4	5	6	TOTAL	PM Time	IN 1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	0	0	0	0	0	0	0
0:15	0	0	0	0	0	0	0	12:15	0	0	1	1	0	0	2
0:30	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0
0:45	0	0	0	0	0	0	0	12:45	2	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	13:00	0	0	0	1	0	0	1
1:15	0	0	0	0	0	0	0	13:15	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	13:30	2	0	0	0	0	0	2
1:45	0	0	0	0	0	0	0	13:45	0	1	1	0	0	0	2
2:00	0	0	0	0	0	0	0	14:00	2	0	0	0	0	0	2
2:15	0	0	0	0	0	0	0	14:15	0	0	0	1	0	0	1
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	0	0	0	0	0	2
3:00	0	0	0	0	0	0	0	15:00	2	0	0	0	0	0	2
3:15	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	15:30	0	1	0	0	0	0	1
3:45	0	0	0	0	0	0	0	15:45	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	0	0	0	0	0	0
4:30	8	0	0	1	0	0	9	16:30	0	0	0	0	0	0	0
4:45	6	0	0	1	0	0	7	16:45	0	1	0	0	0	0	1
5:00	1	0	0	2	0	0	3	17:00	0	0	0	0	0	0	0
5:15	1	0	0	0	0	0	1	17:15	0	0	0	0	0	0	0
5:30	0	0	0	1	0	0	1	17:30	0	0	0	1	0	0	1
5:45	0	0	0	1	0	0	1	17:45	0	0	0	1	0	0	1
6:00	0	0	0	3	0	0	3	18:00	0	0	0	0	0	0	0
6:15	0	0	0	1	0	0	1	18:15	0	0	0	0	0	0	0
6:30	0	0	0	1	0	0	1	18:30	0	0	0	0	0	0	0
6:45	0	1	1	1	0	0	3	18:45	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	19:00	0	0	0	1	0	0	1
7:15	0	0	0	0	0	0	0	19:15	0	0	0	0	0	0	0
7:30	0	1	0	0	0	0	1	19:30	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	19:45	0	0	0	0	0	0	0
8:00	1	1	0	1	0	0	3	20:00	0	0	0	0	0	0	0
8:15	0	0	0	1	0	0	1	20:15	2	0	0	0	0	0	2
8:30	3	0	0	3	0	0	6	20:30	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	20:45	0	0	0	0	0	0	0
9:00	0	0	0	1	0	0	1	21:00	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	21:15	0	0	0	0	0	0	0
9:30	0	1	0	1	0	0	2	21:30	0	0	0	0	0	0	0
9:45	1	0	0	0	0	0	1	21:45	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	22:00	0	0	0	0	0	0	0
10:15	1	0	0	1	0	0	2	22:15	0	0	0	0	0	0	0
10:30	1	0	0	0	0	0	1	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	23:00	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	23:15	0	0	0	0	0	0	0
11:30	1	0	0	1	0	0	2	23:30	0	0	0	0	0	0	0
11:45	0	0	0	1	0	0	1	23:45	0	0	0	0	0	0	0
TOTAL	27	4	1	22	0	0	54	TOTAL	16	3	2	6	0	0	27

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	22

AM PEAK HOUR	2:15 PM
AM PEAK VOLUME	9

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	43	7	3	28	0	0	81
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	53.1%	8.6%	3.7%	34.6%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	94	16	6	57	0	0	173
CLASS 6	Buses	% OF TOTAL	54.3%	9.2%	3.5%	32.9%	0.0%	0.0%	100.0%

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023
JOB #: SC3845
CITY: Fontana
LOCATION: CLASS1 DWY1 north of Jurupa.

AM TIME	OUT 1	2	3	4	5	6	TOTAL	PM Time	OUT 1	2	3	4	5	6	TOTAL
0:00	2	0	0	0	0	0	2	12:00	0	0	0	0	0	0	0
0:15	3	0	0	0	0	0	3	12:15	2	0	1	0	0	0	3
0:30	0	0	0	0	0	0	0	12:30	1	0	0	1	0	0	2
0:45	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	13:00	2	0	0	0	0	0	2
1:15	0	0	0	0	0	0	0	13:15	0	0	0	1	0	0	1
1:30	0	0	0	0	0	0	0	13:30	11	0	0	0	0	0	11
1:45	0	0	0	0	0	0	0	13:45	2	1	0	1	0	0	4
2:00	0	0	0	0	0	0	0	14:00	0	0	1	0	0	0	1
2:15	0	0	0	0	0	0	0	14:15	0	0	0	0	0	0	0
2:30	0	0	0	0	0	0	0	14:30	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	14:45	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	15:00	0	1	0	0	0	0	1
3:15	0	0	0	0	0	0	0	15:15	0	1	0	0	0	0	1
3:30	0	0	0	0	0	0	0	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	0	0	0	1	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	16:15	0	1	0	0	0	0	1
4:30	1	0	0	0	0	0	1	16:30	1	0	0	0	0	0	1
4:45	0	0	0	0	0	0	0	16:45	1	1	0	0	0	0	2
5:00	0	0	0	0	0	0	0	17:00	0	0	0	0	0	0	0
5:15	0	0	0	1	0	0	1	17:15	0	0	0	0	0	0	0
5:30	0	0	0	3	0	0	3	17:30	0	0	0	0	0	0	0
5:45	0	0	0	1	0	0	1	17:45	0	0	0	0	0	0	0
6:00	0	0	0	0	0	0	0	18:00	0	0	0	1	0	0	1
6:15	0	0	0	0	0	0	0	18:15	0	0	0	1	0	0	1
6:30	0	0	0	1	0	0	1	18:30	0	0	0	0	0	0	0
6:45	0	0	1	2	0	0	3	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	1	0	0	0	0	0	1
7:15	0	0	0	4	0	0	4	19:15	0	0	0	1	0	0	1
7:30	0	0	0	0	0	0	0	19:30	1	0	0	0	0	0	1
7:45	0	0	0	0	0	0	0	19:45	1	0	0	0	0	0	1
8:00	0	0	0	1	0	0	1	20:00	1	0	0	0	0	0	1
8:15	3	1	0	0	0	0	4	20:15	0	0	0	0	0	0	0
8:30	1	0	0	0	0	0	1	20:30	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	1	20:45	1	0	0	0	0	0	1
9:00	0	1	0	2	0	0	3	21:00	0	0	0	0	0	0	0
9:15	0	0	0	2	0	0	2	21:15	0	0	0	0	0	0	0
9:30	0	0	0	2	0	0	2	21:30	0	0	0	0	0	0	0
9:45	2	0	0	0	0	0	2	21:45	0	0	0	0	0	0	0
10:00	0	1	0	0	0	0	1	22:00	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	22:15	0	0	0	0	0	0	0
10:30	1	0	0	1	0	0	2	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	23:00	3	0	0	0	0	0	3
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	0	1	0	0	0	0	1	23:30	5	0	0	0	0	0	5
11:45	0	0	0	1	0	0	1	23:45	3	0	0	0	0	0	3
TOTAL	15	4	1	22	0	0	42	TOTAL	36	5	2	7	0	0	50
				AM PEAK HOUR			9:00 AM							AM PEAK HOUR	1:00 PM
				AM PEAK VOLUME			9							AM PEAK VOLUME	18

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	BUS

	1	2	3	4	5	6	TOTAL
TOTAL: AM+PM	51	9	3	29	0	0	92
% OF TOTAL	55.4%	9.8%	3.3%	31.5%	0.0%	0.0%	100.0%

A13123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, March 09, 2023 **CITY:** Fontana

JOB #: SC3845 **LOCATION:** CLASS1 DWY1 north of Jurupa.

AM	COMBINED							PM	COMBINED						
TIME	1	2	3	4	5	6	TOTAL	Time	1	2	3	4	5	6	TOTAL
0:00	2	0	0	0	0	0	2	12:00	0	0	0	0	0	0	0
0:15	3	0	0	0	0	0	3	12:15	2	0	2	1	0	0	5
0:30	0	0	0	0	0	0	0	12:30	1	0	0	1	0	0	2
0:45	0	0	0	0	0	0	0	12:45	2	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	13:00	2	0	0	1	0	0	3
1:15	0	0	0	0	0	0	0	13:15	0	0	0	1	0	0	1
1:30	0	0	0	0	0	0	0	13:30	13	0	0	0	0	0	13
1:45	0	0	0	0	0	0	0	13:45	2	2	1	1	0	0	6
2:00	0	0	0	0	0	0	0	14:00	2	0	1	0	0	0	3
2:15	0	0	0	0	0	0	0	14:15	0	0	0	1	0	0	1
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	2	0	0	0	0	0	2
3:00	0	0	0	0	0	0	0	15:00	2	1	0	0	0	0	3
3:15	0	0	0	0	0	0	0	15:15	0	1	0	0	0	0	1
3:30	0	0	0	0	0	0	0	15:30	0	1	0	0	0	0	1
3:45	0	0	0	0	0	0	0	15:45	0	0	0	1	0	0	1
4:00	0	0	0	0	0	0	0	16:00	0	0	0	0	0	0	0
4:15	3	0	0	0	0	0	3	16:15	0	1	0	0	0	0	1
4:30	9	0	0	1	0	0	10	16:30	1	0	0	0	0	0	1
4:45	6	0	0	1	0	0	7	16:45	1	2	0	0	0	0	3
5:00	1	0	0	2	0	0	3	17:00	0	0	0	0	0	0	0
5:15	1	0	0	1	0	0	2	17:15	0	0	0	0	0	0	0
5:30	0	0	0	4	0	0	4	17:30	0	0	0	1	0	0	1
5:45	0	0	0	2	0	0	2	17:45	0	0	0	1	0	0	1
6:00	0	0	0	3	0	0	3	18:00	0	0	0	1	0	0	1
6:15	0	0	0	1	0	0	1	18:15	0	0	0	1	0	0	1
6:30	0	0	0	2	0	0	2	18:30	0	0	0	0	0	0	0
6:45	0	1	2	3	0	0	6	18:45	0	0	0	0	0	0	0
7:00	0	0	0	1	0	0	1	19:00	1	0	0	1	0	0	2
7:15	0	0	0	4	0	0	4	19:15	0	0	0	1	0	0	1
7:30	0	1	0	0	0	0	1	19:30	1	0	0	0	0	0	1
7:45	0	0	0	0	0	0	0	19:45	1	0	0	0	0	0	1
8:00	1	1	0	2	0	0	4	20:00	1	0	0	0	0	0	1
8:15	3	1	0	1	0	0	5	20:15	2	0	0	0	0	0	2
8:30	4	0	0	3	0	0	7	20:30	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	1	20:45	1	0	0	0	0	0	1
9:00	0	1	0	3	0	0	4	21:00	0	0	0	0	0	0	0
9:15	0	0	0	2	0	0	2	21:15	0	0	0	0	0	0	0
9:30	0	1	0	3	0	0	4	21:30	0	0	0	0	0	0	0
9:45	3	0	0	0	0	0	3	21:45	0	0	0	0	0	0	0
10:00	0	1	0	0	0	0	1	22:00	0	0	0	0	0	0	0
10:15	1	0	0	1	0	0	2	22:15	0	0	0	0	0	0	0
10:30	2	0	0	1	0	0	3	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	23:00	3	0	0	0	0	0	3
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	1	1	0	1	0	0	3	23:30	5	0	0	0	0	0	5
11:45	0	0	0	2	0	0	2	23:45	3	0	0	0	0	0	3
TOTAL	42	8	2	44	0	0	96	TOTAL	52	8	4	13	0	0	77

AM PEAK HOUR	4:15 AM
AM PEAK VOLUME	23

AM PEAK HOUR	1:30 PM
AM PEAK VOLUME	23

TOTAL: AM+PM	94	16	6	57	0	0	173
% OF TOTAL	54.3%	9.2%	3.5%	32.9%	0.0%	0.0%	100.0%

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS
CLASS 5	RV
CLASS 6	Buses

APPENDIX F

PROJECT SITE PLAN

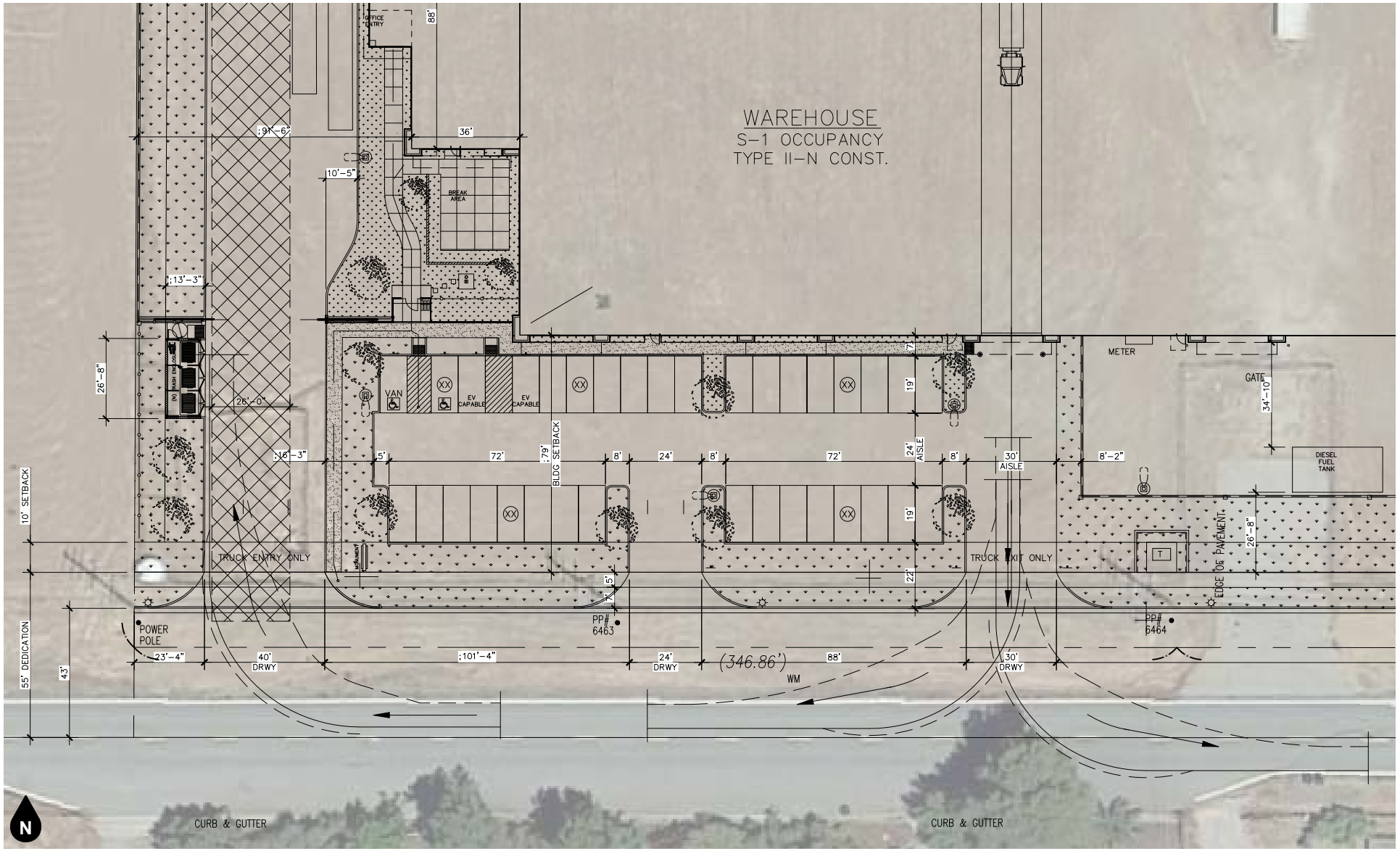


Figure F1
Truck Turning Paths West Driveways

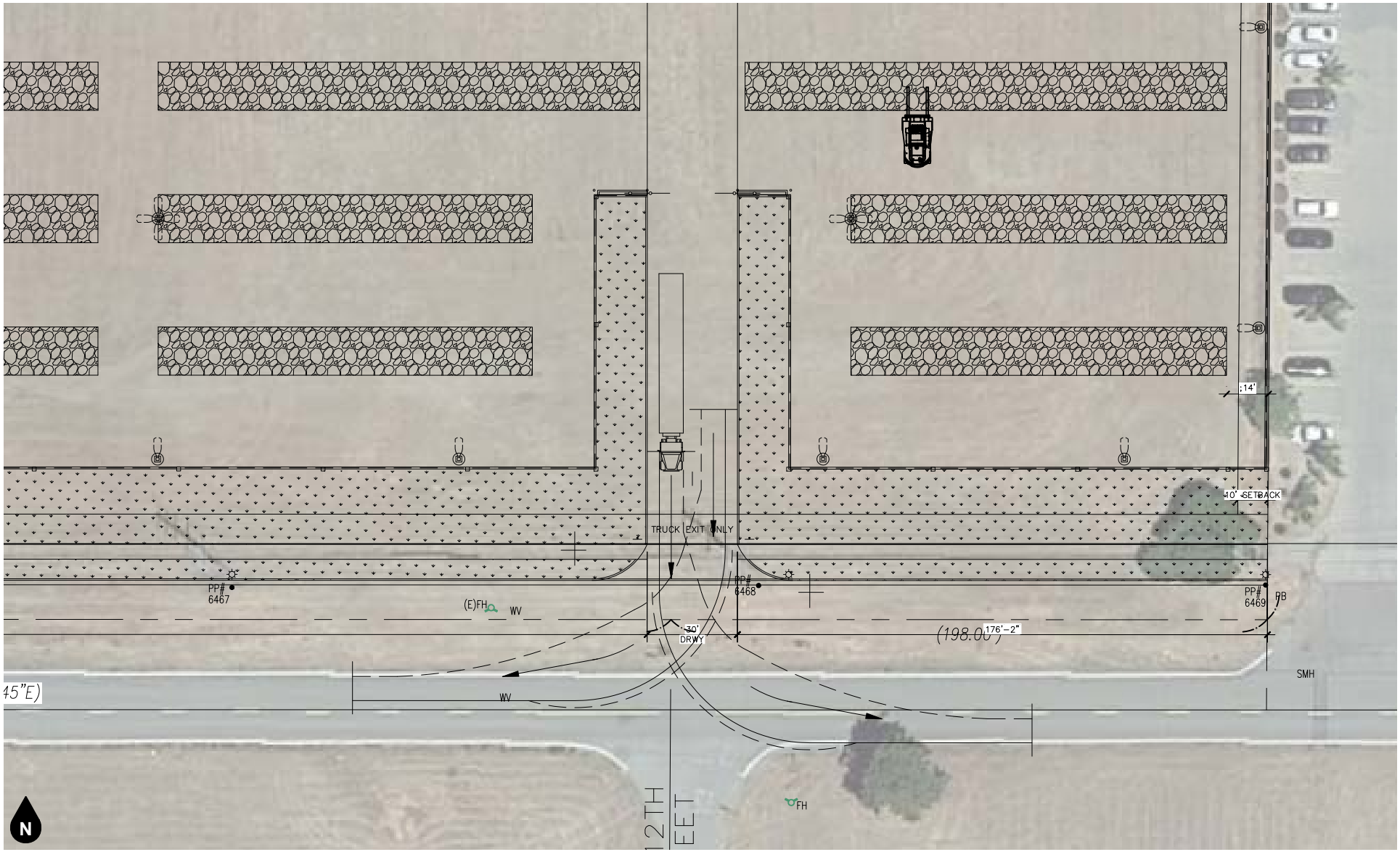


Figure F2
Truck Turning Paths East Driveway

APPENDIX G

ACCESS GATE QUEUING WORKSHEET

Table G-1
Gate Stacking Analysis[1]

PROJECT:	Brown Strauss Banning Industrial Project		DATE:	2023-1016
LOCATION:	Project West Driveway at Lincoln Street		JN:	19588

Gate Distribution: 100%	AM		PM	
	INBOUND	OUTBOUND	INBOUND	OUTBOUND
	9	14	6	3
DEMAND RATE (q) (veh/hr)	9	14	6	3
SERVICE RATE (Q) (veh/hr/channel)[2]	195	400	195	400
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))	0.05	0.04	0.03	0.01
LENGTH OF QUEUED VEHICLE (L) FEET	80	80	80	80
LENGTH OF SERVICE VEHICLE (L) FEET	100	100	100	100
Q(M) VALUE [4]	0.05	0.04	0.03	0.01
NO. OF VEHICLES BEING SERVED (N)	1.00	1.00	1.00	1.00
NO. OF VEHICLES IN QUEUE (M)	-1.03	-1.11	-1.14	-1.37
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	100	100	100	100

Notes:

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

(2) *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972) assumes 195 vehicles per hour service rate for an access gate controlled by cashier providing direction/information, similar to a guard checking in a truck.

(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.

GANDDINI GROUP INC.

714.795.3100 | ganddini.com