TTM20793 RIALTO
TRAFFIC IMPACT ANALYSIS

City of Rialto

September 24, 2025

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

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prepared by

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Project No. 19828

TABLE OF CONTENTS

EXECUTIVE SUMMARY ..... **V**

1. INTRODUCTION **1**

Purpose and Objectives 1
Project Description 1
Scope of Analysis 1
Study Area 1
Analysis Scenarios 2

2. METHODOLOGY **7**

Level of Service/Operational Analysis Methodology (Non-CEQA) 7
Intersections: Highway Capacity Manual Delay Methodology 7
Roadway Segment Analysis Methodology 7
Transportation Effects 8
Vehicle Miles Traveled Analysis Methodology (CEQA) 9
VMT Screening Assessment 9
VMT Assessment for Non-Screened Projects 10

3. EXISTING CONDITIONS **11**

Existing Roadway System 11
Pedestrian Facilities 11
Transit Facilities 11
General Plan Context 12
Bicycle Facilities Master Plan 12
Designated Truck Routes 12
Existing Roadway Volumes 12
Existing Intersection Level of Service 12
Existing Roadway Segment Level of Service 12

4. PROJECT TRIP FORECASTS **25**

Project Trip Generation 25
Project Trip Distribution & Assignment 25

5. FUTURE VOLUME FORECASTS **32**

Method of Projection 32
Ambient Growth 32
Other Developments 32
Regional Travel Demand Model Growth 32
Analysis Scenario Volumes 32
Existing Plus Ambient Growth 32
Existing Plus Ambient Growth Plus Project 33
Opening Year (2028) Without Project 33
Opening Year (2028) With Project 33
Year 2050 Without Project 33
Year 2050 With Project 33

6. FUTURE LEVELS OF SERVICE ANALYSIS **57**

Existing Plus Ambient Growth 57
Opening Year (2028) 57
Year 2050 57
Traffic Signal Warrant Analysis 58

Study Roadway Segments Level of Service 58
7. SITE ACCESS & ON-SITE CIRCULATION 63
Project Design Features 63
Site Access Queuing Analysis 64
Gate Stacking Analysis 64
8. IMPROVEMENTS & FAIR SHARE ANALYSIS 67
Off-Site Improvements 67
Development Impact Fee 67
Fair Share Analysis 67
9. VEHICLES MILES TRAVELED (VMT) ASSESSMENT 69
Background 69
VMT Screening Criteria 69
TPA Screening 70
Low VMT Area Screening 70
Project Type Screening 70
Project Assessment 71
10. CONCLUSIONS 72
Project Trip Generation 72
Level of Service Analysis 72
Summary of Improvements 72
Vehicle Miles Traveled 72

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Traffic Count Data
Appendix D Intersection Level of Service Worksheets
Appendix E Post Processing Worksheets
Appendix F Gate Stacking Analysis
Appendix G Traffic Signal Warrant Worksheet

LIST OF TABLES

Table 1. Existing Intersection Levels of Service 13
Table 2. Existing Roadway Segment Level of Service 14
Table 3. Project Trip Generation 26
Table 4. Other Development Trip Generation 34
Table 5. Existing Plus Ambient Growth Plus Project Intersection Levels of Service & Project-Related Effect 59
Table 6. Opening Year (2028) With Project Intersection Levels of Service & Project-Related Effect 60
Table 7. Year 2050 With Project Intersection Levels of Service & Project-Related Effect 61
Table 8. Future Scenarios Roadway Segment Levels of Service 62
Table 9. Site Access Queuing Analysis 65
Table 10. Gate Stacking Analysis 66
Table 11. Fair Share Analysis 68

LIST OF FIGURES

Figure 1. Regional Location Map 3
Figure 2. Project Location Map 4
Figure 3. Site Plan 5
Figure 4. Study Area 6
Figure 5. Existing Lane Geometry and Intersection Traffic Controls 15
Figure 6. Existing Pedestrian Facilities 16
Figure 7. Existing Transit Routes 17
Figure 8. City of Rialto General Plan Circulation Element 18
Figure 9. City of Rialto General Plan Roadway Cross-Sections 19
Figure 10. City of Rialto Bicycle Facilities Master Plan 20
Figure 11. City of Rialto Designated Truck Routes 21
Figure 12. Existing Average Daily Traffic Volumes 22
Figure 13. Existing AM Peak Hour Intersection Turning Movement Volumes 23
Figure 14. Existing PM Peak Hour Intersection Turning Movement Volumes 24
Figure 15. Project Trip Distribution (Outbound) 27
Figure 16. Project Trip Distribution (Inbound) 28
Figure 17. Project Average Daily Traffic Volumes 29
Figure 18. Project AM Peak Hour Intersection Turning Movement Volumes 30
Figure 19. Project PM Peak Hour Intersection Turning Movement Volumes 31
Figure 20. Other Development Location Map 35
Figure 21. Other Development Average Daily Traffic Volumes 36
Figure 22. Other Development AM Peak Hour Intersection Turning Movement Volumes 37
Figure 23. Other Development PM Peak Hour Intersection Turning Movement Volumes 38
Figure 24. Existing Plus Ambient Growth Average Daily Traffic Volumes 39
Figure 25. Existing Plus Ambient Growth AM Peak Hour Intersection Turning Movement Volumes 40

Figure 26. Existing Plus Ambient Growth PM Peak Hour Intersection Turning Movement Volumes 41
Figure 27. Existing Plus Ambient Growth Plus Project Average Daily Traffic Volumes 42
Figure 28. Existing Plus Ambient Growth Plus Project AM Peak Hour Intersection Turning Movement Volumes 43
Figure 29. Existing Plus Ambient Growth Plus Project PM Peak Hour Intersection Turning Movement Volumes 44
Figure 30. Opening Year (2028) Without Project Average Daily Traffic Volumes 45
Figure 31. Opening Year (2028) Without Project AM Peak Hour Intersection Turning Movement Volumes 46
Figure 32. Opening Year (2028) Without Project PM Peak Hour Intersection Turning Movement Volumes 47
Figure 33. Opening Year (2028) With Project Average Daily Traffic Volumes 48
Figure 34. Opening Year (2028) With Project AM Peak Hour Intersection Turning Movement Volumes 49
Figure 35. Opening Year (2028) With Project PM Peak Hour Intersection Turning Movement Volumes 50
Figure 36. Year 2050 Without Project Average Daily Traffic Volumes 51
Figure 37. Year 2050 Without Project AM Peak Hour Intersection Turning Movement Volumes 52
Figure 38. Year 2050 Without Project PM Peak Hour Intersection Turning Movement Volumes 53
Figure 39. Year 2050 With Project Average Daily Traffic Volumes 54
Figure 40. Year 2050 With Project AM Peak Hour Intersection Turning Movement Volumes 55
Figure 41. Year 2050 With Project PM Peak Hour Intersection Turning Movement Volumes 56
Figure 42. Recommended Lane Geometry and Intersection Traffic Controls 73

EXECUTIVE SUMMARY

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in this study.

Project Description

The 6.93-acre project site (APN: 0264-012-48 and 58) is located on the east side of Linden Avenue approximately 300 feet north of Summit Avenue in the City of Rialto, California. The project site is currently vacant and zoned residential (R-1D).

The proposed project (MC-2025-0013) involves the development of 67 single-family residential dwelling units. Vehicle access for the project site is proposed via a gated entry at the intersection of Linden Avenue and Candlewood Avenue. Two emergency vehicle access (EVA) driveways are proposed for emergency vehicles only.

Project Trip Generation

The proposed project is forecast to generate a total of approximately 632 daily trips, including 47 trips during the AM peak hour and 63 trips during the PM peak hour.

Level of Service Analysis

The study intersections currently operate and are forecast to continue operating within acceptable Levels of Service (D or better) during the peak hours for the Existing, Existing Plus Ambient Growth, Existing Plus Ambient Growth Plus Project, Opening Year (2028) Without Project and Opening Year (2028) With Project analysis scenario conditions.

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for the Year 2050 with and without Project scenario conditions, except for the following intersection that is forecast to operate at Level of Service E during the AM peak hour:

1. Linden Avenue (NS) at Riverside Avenue (EW)

Summary of Improvements

Project design features, as detailed in the Site Access & On-Site Circulation (Section 7), involve improvements necessary to provide project site access.

Although the Linden Avenue at Riverside Avenue [#1] intersection is forecast to continue operating at LOS E during the AM peak hour for Year 2050 With Project, the project-related traffic does not increase delay at the intersection by more than the City-established threshold of 2.0 seconds or more; therefore, the project is considered to have no substantial adverse effect at this intersection. As intersection improvements are identified to address cumulative deficiencies, the project may contribute toward improvements on a fair share basis.

To maintain an acceptable Level of Service at the study intersection the following improvements are recommended for Year 2050 conditions.

1. Linden Avenue (NS) at Riverside Avenue (EW)
    - Construct one additional westbound left turn lane.
    - Install northbound right turn overlap signal phasing.

Vehicle Miles Traveled

The proposed project satisfies the City-established vehicle miles traveled (VMT) screening criteria for projects located in a Low VMT area, and the project may be presumed to result in a less than significant VMT impact; further VMT analysis or mitigation is not required.

1. INTRODUCTION

This section provides an overview of 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 the development of the proposed project in the context of the City of Rialto's discretionary authority for conformance with locally established operational standards. Although this is a technical report, effort has been made to prepare the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with technical terms.

This study was prepared in consultation with the City of Rialto staff following the procedures and methodologies for assessing transportation impacts established by the City of Rialto. 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 compliance with California Environmental Quality Act (CEQA) requirements, a vehicle miles traveled (VMT) assessment is documented in Section 9 Vehicles Miles Traveled (VMT) Assessment of this report.

PROJECT DESCRIPTION

The 6.93-acre project site (APN: 0264-012-48 and 58) is located on the east side of Linden Avenue approximately 300 feet north of Summit Avenue in the City of Rialto, California. The project site is currently vacant and zoned residential (R-1D). Figure 1 and Figure 2 show the regional and project location maps.

The proposed project (MC-2025-0013) involves the development of 67 single-family residential dwelling units. Vehicle access for the project site is proposed via a gated entry at the intersection of Linden Avenue and Candlewood Avenue. Two emergency vehicle access (EVA) driveways are proposed for emergency vehicles only. Figure 3 illustrates the project site plan.

SCOPE OF ANALYSIS

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

Study Area

Figure 4 illustrates the study area. In accordance with the City of Rialto requirements, the study area was determined in consultation with the City of Rialto engineering staff and consists of classified roadway intersections to which the project is forecast to contribute 50 or more peak hour trips. Based on the project trip generation and distribution forecasts presented later in this report, the study area consists of the following study intersections:

Intersections

1. Linden Avenue (NS) at Riverside Avenue (EW)[1]
2. Linden Avenue (NS) at Candlewood Avenue (EW)[2]
3. Linden Avenue (NS) at Summit Avenue (EW)

[1] (NS) = North-South roadway; (EW) = East-West roadway
[2] The primary project driveway aligns with Candlewood Avenue. The existing intersection is modified from a T-intersection to a 4-legged intersection.

Roadway Segment

1. Linden Avenue (Riverside Avenue to Candlewood Avenue)

Analysis Scenarios

This study includes an evaluation of the following analysis scenarios for weekday AM and PM peak hour conditions:

- Existing
- Existing Plus Ambient Growth
- Existing Plus Ambient Growth Plus Project
- Opening Year (2028) Without Project
- Opening Year (2028) With Project
- Year 2050 Without Project
- Year 2050 With Project

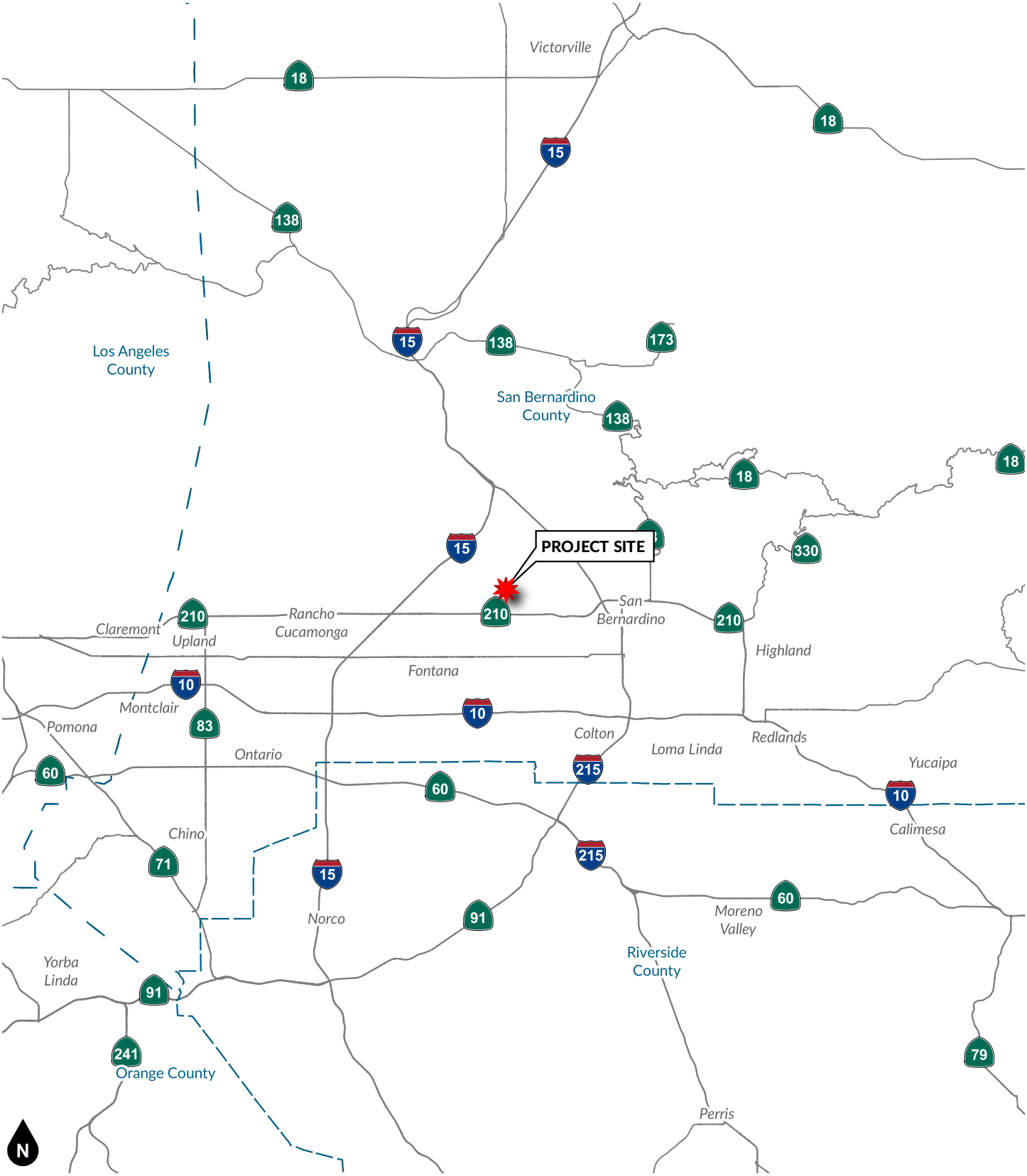


Figure 1
Regional Location Map

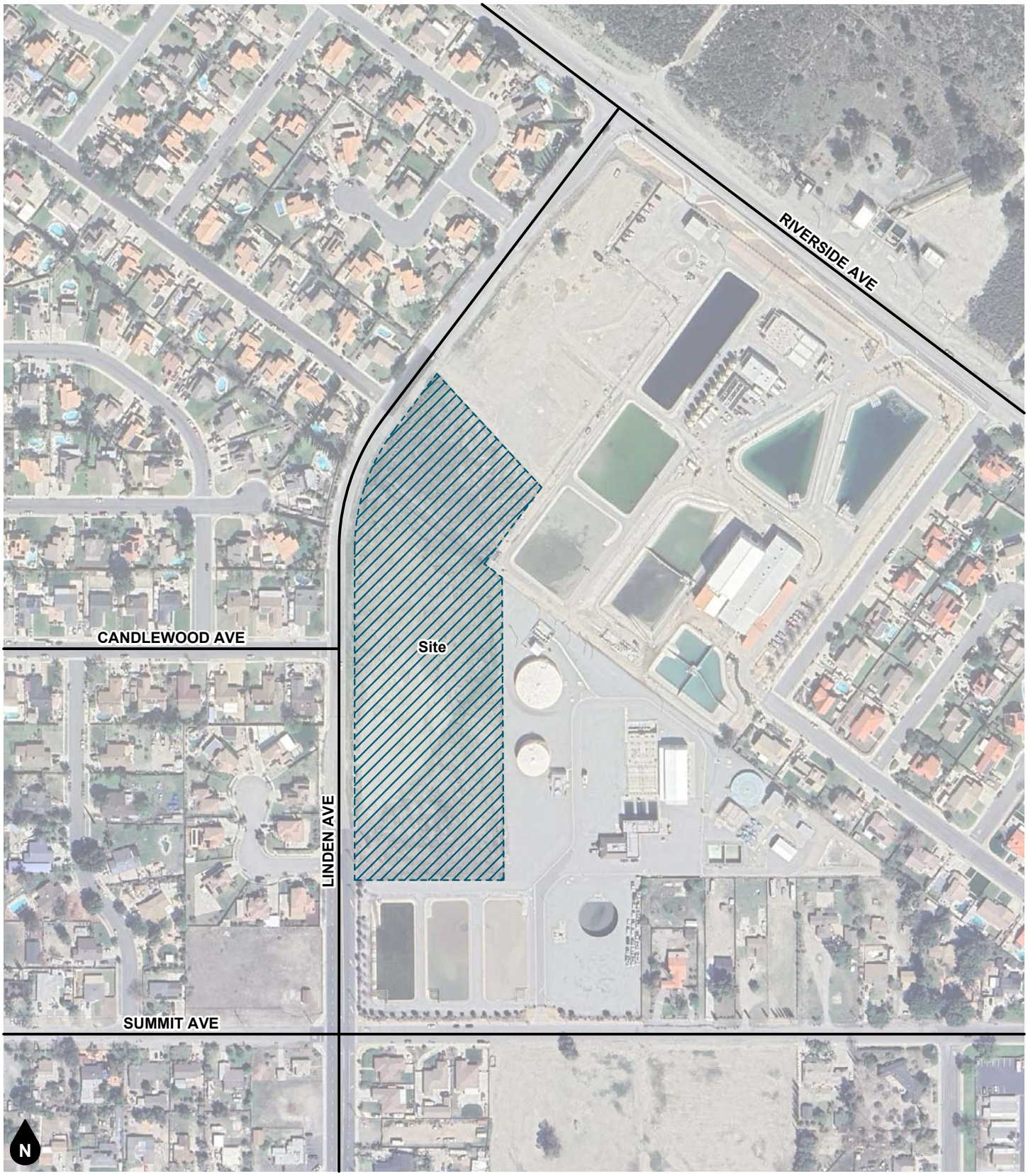


Figure 2
Project Location Map

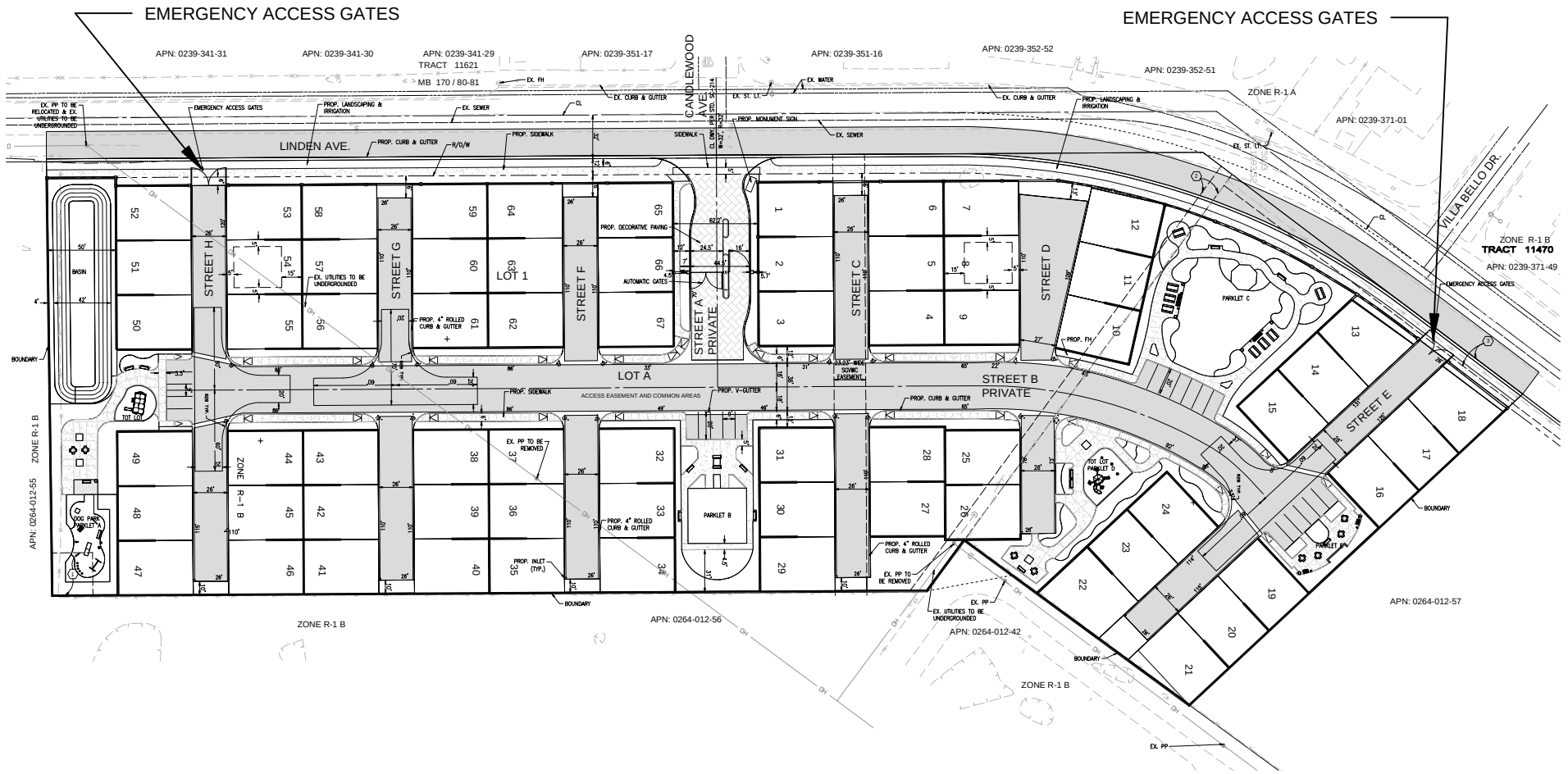
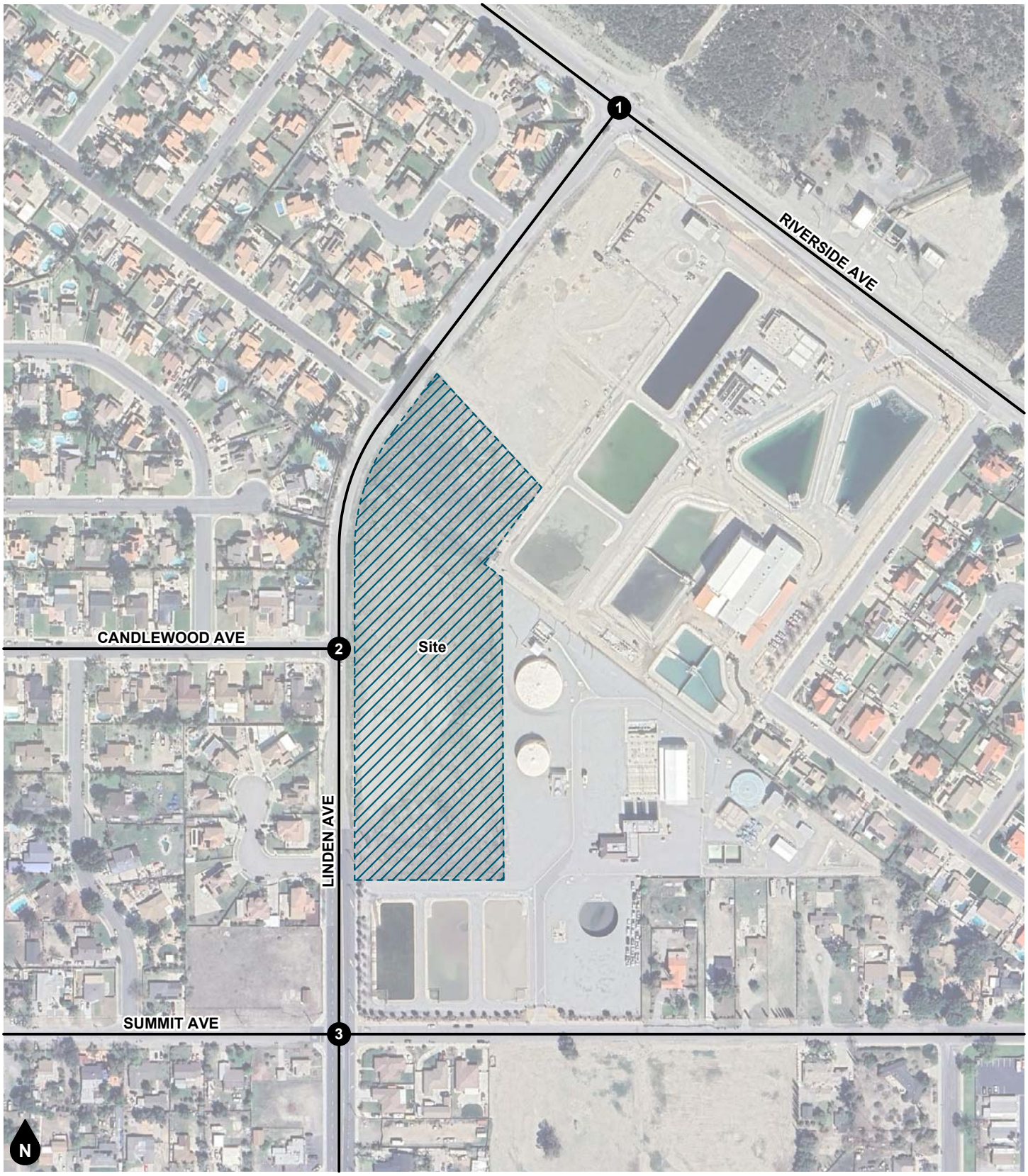


Figure 3
Site Plan



Legend

(#) Study Intersection

Figure 4
Study Area

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies. This traffic impact analysis is based on the *City of Rialto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service (LOS) Assessment* (Updated December 2024) ["City TIA Guidelines"].

LEVEL OF SERVICE/OPERATIONAL ANALYSIS METHODOLOGY (NON-CEQA)

Level of Service analysis is performed to assess 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.

Intersections: Highway Capacity Manual Delay Methodology

City of Rialto intersections are analyzed using the intersection delay methodology based on procedures contained in the *Highway Capacity Manual* (HCM) (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. At intersections with cross street stop control (i.e., one- or two-way stop control), the Level of Service is determined by the average control delay for the worst minor street approach or major street left-turn movement. Intersection delay analysis was performed with default capacity values and adjustment factors recommended in the HCM. The intersection Level of Service is based on the thresholds contained within the HCM.

Level of Service	Delay Methodology	
	Signalized Intersection	Unsignalized Intersection
	Seconds per Vehicle	Seconds per Vehicle
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* (7th 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). Intersection analysis was performed using the Vistro software. 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 minor street approach or major street left-turn movement. The Level of Service analysis was performed in accordance with parameters specified in the City TIA Guidelines.

Roadway Segment Analysis Methodology

The methodology used to assess roadway segment operations is known as the daily volume-to-capacity method. The methodology compares the average daily traffic (ADT) volume using the roadway segment to

the capacity of the roadway segment to calculate the volume-to-capacity (V/C) ratio, which is then correlated to Level of Service based on the following thresholds:

Level of Service	Volume / Capacity
A	0.000 - 0.600
B	0.601 - 0.700
C	0.701 - 0.800
D	0.801 - 0.900
E	0.901 - 1.000
F	> 1.0

Source: Transportation Research Board *Highway Capacity Manual* (7th Edition).

The roadway segment daily capacity analysis is intended to be used as a high-level planning guide to estimate anticipated roadway segment operations based on theoretical maximum two-way average daily traffic (ADT) volumes that a given roadway segment can accommodate within one day given typical peak hour characteristics. The actual capacity of a roadway is influenced by several factors, including street width, alignment, number of travel lanes, number of intersections and driveways, presence of on-street parking, and traffic signal cycle length. The number of turn lanes and intersection controls should be determined based on a more-detailed peak hour intersection analysis at the critical ends. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes.

Roadway Classification	Number of Lanes	Maximum Two-way Daily Traffic Volume (ADT) Level of Service		
		C	D	Capacity E
Local	2	2,500-2,799	2,800-3,099	3,100 +
Collector (60' or 64')	2	9,900-11,199	11,200-12,499	12,500 +
Industrial (45')	2	9,900-11,199	11,200-12,499	12,500 +
Arterial[1]	2	14,400-16,199	16,200-17,999	18,000 +
Secondary Highway	4	16,900-19,399	19,400-21,199	22,000 +
Modified Arterial (100')	4	26,200-29,599	29,600-32,999	33,000 +
Arterial (120')	6	38,700-44,099	44,100-49,499	49,500 +

Source: *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment (LOS)* (City of Rialto, December 2024).

1. Two lane roads designated as future arterials that conform to arterial design standards for vertical and horizontal alignments are analyzed as arterials.

Transportation Effects

Intersections

In accordance to Policy 4-1.20 for signalized intersections, the City of Rialto has established a minimum acceptable Level of Service D for peak hour intersection operations, except for Riverside Avenue south of the Metrolink tracks all the way to the City's southern border, which can operate at LOS E.

In accordance to Policy 4-1.21 for unsignalized intersections, the City of Rialto has established a maximum acceptable delay of 120 seconds for peak hour intersection operations.

A substantial transportation effect at a signalized study intersection occurs if the project degrades intersection operations from an acceptable Level of Service (D or better) to an unacceptable Level of Service (E or F), or if the project-related increase in delay is equal to or greater than the following:

Pre-project Level of Service	Change in Delay
E	2.0 seconds
F	1.0 second

Where improvements are identified to address project Level of Service deficiencies, improvements for signalized intersections should be identified such that the intersections are forecast to operate at an acceptable Levels of Service during the peak hours. Furthermore, unsignalized intersections should have improvements identified that provide the pre-project Level of Service at a minimum.

A cumulative Level of Service deficiency occurs when an intersection is forecast to operate Levels of Service (E or F) for the Without Project condition, and the With Project condition does not degrade the level of service delay by the City-specified threshold. Where improvements are identified to address cumulative Level of Service deficiencies, a project fair share cost estimate is provided based on the volume of project traffic using the impacted facility divided by the total "new" traffic (i.e., ambient growth and other developments).

Roadway Segment

In accordance to City Guidelines for roadway segments, the City of Rialto has established a minimum acceptable volume to capacity ratio (v/c) less than one (1.0).

Generally, close to signalized intersections the roadway segment operation is dictated by the intersections flow capacity and level of service. However, if the roadway segment exceeds 1,500 feet and the volume to capacity ratio (v/c) is greater than 1.0, the segment should be improved even if the intersections at the end of the segment do not exceed LOS D.

VEHICLE MILES TRAVELED ANALYSIS METHODOLOGY (CEQA)

The metric used to evaluate the transportation impact of land use and transportation projects under current CEQA guidelines 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. The *City of Rialto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service (LOS) Assessment* (Updated December 2024) ["City TIA Guidelines"], were developed based on guidance from the Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (State of California, December 2018). The City of Rialto TIA Guidelines provides methodology for graduated levels of analysis including VMT Screening Assessment, and Detailed VMT Analysis for non-screened projects that do not meet the screening criteria. The project VMT assessment is documented in Section 9.

VMT Screening Assessment

The City TIA Guidelines identify screening criteria for certain types of projects that typically reduce VMT and may be presumed to result in a less than significant VMT impact. To qualify for VMT screening, the project need only satisfy one of the following screening criteria:

- Projects located within a Transit Priority Area (TPA)
  - Projects located within one-half mile radius of a major transit stop[3] or high-quality transit corridor[4]
- Projects located within a low VMT area
  - Site location can be verified with the web-based VMT Screening Tool[5]
- Project Type Screening
  - Local serving land use
  - Projects which generate less than net new 110 daily vehicle[6] trips (ADT)

VMT Assessment for Non-Screened Projects

In accordance with the City TIA Guidelines, the project-generated VMT and project effect on VMT should be calculated for the following scenarios:

- Baseline Conditions: This scenario reflects the existing conditions and is available per the VMT screening tool.
- Baseline Plus Project: This scenario reflects a new base year travel demand model[7] run with the addition of project socio-economic data (SED) to the project traffic analysis zone (TAZ).
- Cumulative No Project: This scenario reflects the existing future year conditions.
- Cumulative Plus Project: This scenario reflects a new future year model run with the addition of project SED to the TAZ.

The cumulative no project scenario shall reflect the adopted Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS). Consequently, if the project is consistent with the RTP/SCS then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence.

VMT Impact Thresholds

For baseline conditions, a project would result in a significant impact if the project generated VMT per service population (population plus employment) exceeds the County of San Bernardino regional average baseline VMT (32.7 VMT per service population).

For cumulative conditions, a project would result in a significant impact if the project generated VMT per service population (population plus employment) exceeds the County of San Bernardino regional average baseline VMT (32.7 VMT per service population) within the City boundary.

If a significant impact is identified, mitigation measures to address the deficit should be identified.

[3] A major transit stop is defined as an existing rail transit station, ferry terminal with bus or rail service, or the intersection of two or more major bus routes with less than 20-minute headways during the peak commute hours (Pub. Resources Code, § 21064.3 and AB2553.).

[4] Fixed route bus service with less than 15-minute headways during the peak commute hours (Pub. Resources Code, § 21155).

[5] The SBCTA VMT Screening Tool was developed from the San Bernardino Transportation Analysis Model (SBTAM) travel forecasting model to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs).

[6] As specified by the OPR Technical Advisory, the term vehicle refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty trucks should only be included in a traffic impact analysis for modeling convenience and ease of calculation (e.g., where data provided combine auto and heavy freight VMT) (CEQA Guidelines, § 15064.3, subd. (a)). Therefore, heavy-duty truck trips should not contribute to a finding of significant traffic (VMT) impact.

[7] The travel demand forecasting for VMT analysis may use the San Bernardino County Transportation Authority (SBCTA) travel demand model.

3. EXISTING CONDITIONS

This section describes the existing transportation setting of the project study area.

EXISTING ROADWAY SYSTEM

Figure 5 shows the existing lane geometry and intersection traffic controls based on a field survey of the study area. Regional access to the project site is provided by Interstate 15 approximately 3.1 miles northwest of the project site and State Route 210 approximately 1.2 miles south of the project site. Local north-south circulation is provided by Linden Avenue and east-west circulation is provided by Riverside Avenue, Candlewood Avenue and Summit Avenue.

Linden Avenue: This two-lane undivided to four-lane divided roadway trends in a north-south direction and is classified as a Secondary Arterial (four-lane undivided with 64-feet roadway section including parking) on the City of Rialto Circulation Plan in the study area. On-street parking is restricted in the project vicinity as space is not available outside of the travel lanes. There are no designated bicycle facilities in the project vicinity. Sidewalks are provided on the east side of the roadway in the project vicinity. The posted speed in the project vicinity is 35 miles per hour.

Riverside Avenue: This three-lane divided roadway trends in a northwest-southeast direction and is classified as a Major Arterial (four to six-lane divided roadway with 96-feet roadway section) on the City of Rialto General Plan Circulation Plan in the project vicinity. On-street parking is restricted in the project vicinity as space is not available outside of the travel lanes. There are no designated bicycle facilities in the project vicinity; however, a Class II bike lane is shown on the City's Bicycle Facilities Master Plan. Sidewalks are provided on the south side of the roadway in the project vicinity. The posted speed in the project vicinity is 50 miles per hour.

Candlewood Avenue: This two-lane undivided roadway trends in an east-west direction and is unclassified on the City of Rialto Circulation Plan in the study area. On-street parking is permitted in the project vicinity. There are no designated bicycle facilities in the project vicinity. Sidewalks are provided on both sides of the roadway in the project vicinity. The speed limit is not posed in the project vicinity.

Summit Avenue: This two-lane undivided roadway trends in an east-west direction and is classified as a Collector (two-lane undivided roadway with 64-feet roadway section including parking) on the City of Rialto General Plan Circulation Plan in the project vicinity. On-street parking is permitted east of Linden Avenue. There are no designated bicycle facilities in the project vicinity. Sidewalks are provided on both sides of the roadway east of Linden Avenue. The speed limit is not posed in the project vicinity.

PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown on Figure 6. As illustrated on Figure 6, sidewalks are not provided along the project site frontage, currently.

TRANSIT FACILITIES

Figure 7 shows the existing Omnitrans system map in the project vicinity. Route 22 runs along Riverside Avenue west of Linden Avenue and Linden Avenue in the study area. The closest bus stop to the project is at the southwest corner of Linden Avenue and Summit Avenue approximately 950 feet from Candlewood entrance.

General Plan Context

Figure 8 shows the City of Rialto 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 Rialto standard roadway cross-sections are illustrated on Figure 9.

Bicycle Facilities Master Plan

The City of Rialto Bicycle Master Plan is shown on Figure 10. As illustrated on Figure 10, there are proposed bike facilities on Riverside Avenue.

Designated Truck Routes

The City of Rialto designated Truck Routes are shown on Figure 11. As illustrated on Figure 11, Riverside Avenue northwest of the study area is a designated truck route.

Existing Roadway Volumes

Figure 12 shows the existing average daily traffic volumes. The existing average daily traffic volumes were factored from peak hour intersection turning movement volumes using the following formula for each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 12.62[8] = Leg Volume

Figure 13 and Figure 14 show the existing AM and PM peak hour intersection turning movement volumes. Existing peak hour intersection turning movement volumes are based upon AM peak period and PM peak period intersection turning movement counts obtained in August 2025 during typical weekday conditions. The weekday AM peak period was counted between 7:00 AM and 9:00 AM and the weekday PM peak period was counted between 4:00 PM and 6:00 PM. These periods generally capture the peak times for commuter traffic when the roadway system is typically experiencing peak demand. The actual peak hour within each two-hour count period is determined based on the sum of the four consecutive 15-minute periods with the highest total volume entering the intersection. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM and may vary at other intersections depending on the four consecutive 15-minute periods that have the highest total volume. Intersection turning movement count worksheets are provided in Appendix C.

Existing Intersection Level of Service

The study intersection Levels of Service for Existing conditions are shown in Table 1**.** Detailed Level of Service worksheets are provided in Appendix D. As illustrated in Table 1, the study intersections currently operate within acceptable Levels of Service (D or better) during peak hours.

Existing Roadway Segment Level of Service

The roadway segment capacity analysis for Existing conditions is shown in Table 2. As illustrated in Table 2, the study roadway segments currently operate within acceptable Levels of Service (D or better).
.

[8] Approximate weighted average K factor (ADT / PM peak hour volume) is based on 24-hour count data for the roadway segments of Linden Avenue between Riverside Avenue and Candlewood Avenue.

Table 1
Existing Intersection Levels of Service

Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS
1. Linden Avenue at Riverside Avenue	TS	16.9	B	10.9	B
2. Linden Avenue at Candlewood Avenue	CSS	15.8	C	12.0	B
3. Linden Avenue at Summit Avenue	CSS	17.1	C	11.9	B

Notes:

1. TS = Traffic Signal.; CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or 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 2
Existing Roadway Segment Level of Service

ID	Roadway	Segment		Classification	Lanes	Capacity	Existing		
		From	To				ADT[2]	V/C[2]	LOS[2]
1.	Linden Avenue	Riverside Avenue	Summit Avenue	Secondary Highway	2	18,000	4,560	0.25	A

Notes:

1. Roadway classifications from the Rialto General Plan Circultation Element, and the cooresponding roadway capacity from the City of Rialto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service (LOS) Assessment (Updated
2. ADT = Average Daily Traffic; V/C = Volume to Capacity Ratio; LOS = Level of Service.

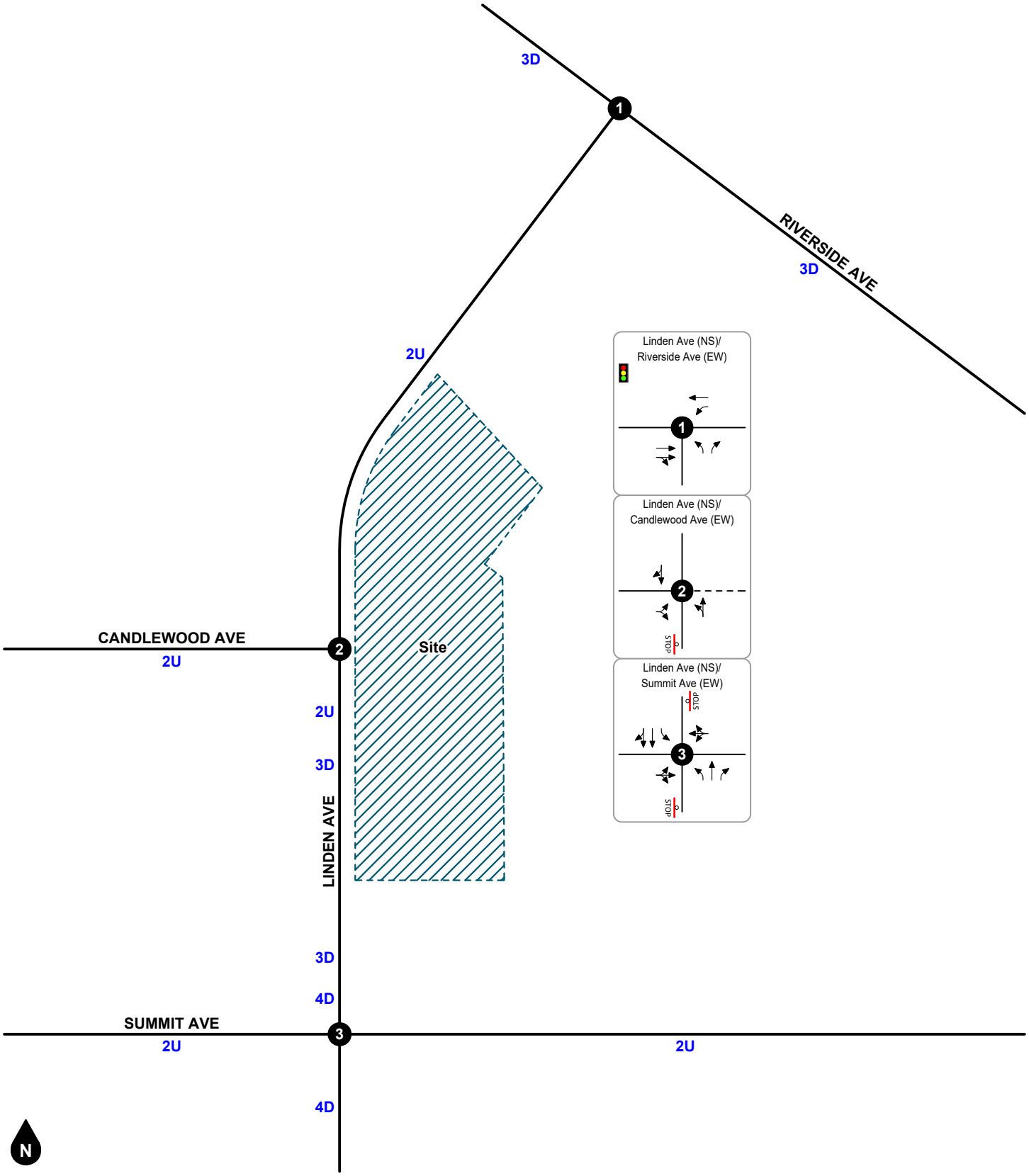
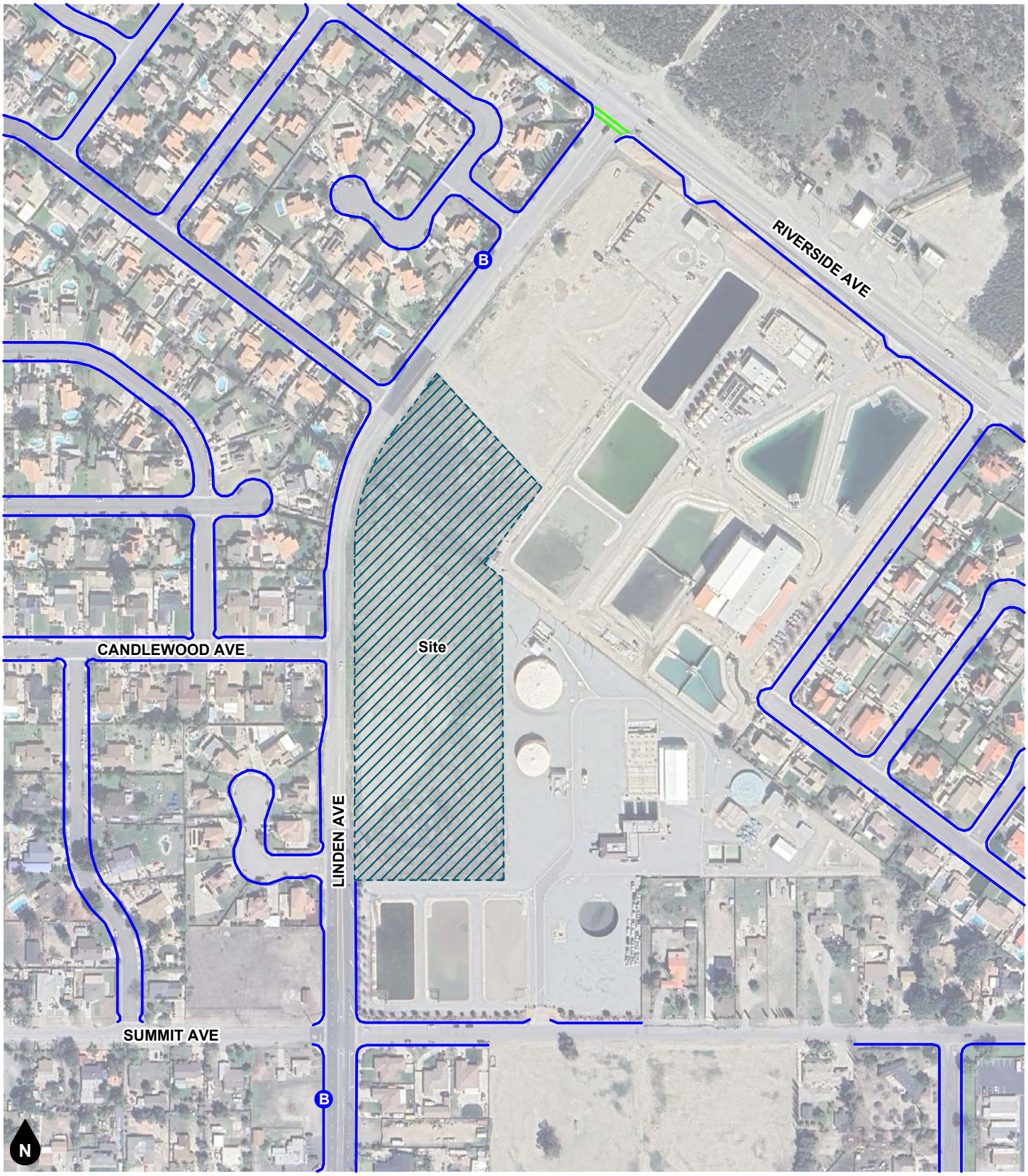


Figure 5
Existing Lane Geometry and Intersection Traffic Controls



Legend
- Sidewalk
- Cross Walk
- B Bus Stop

Figure 6
Existing Pedestrian Facilities

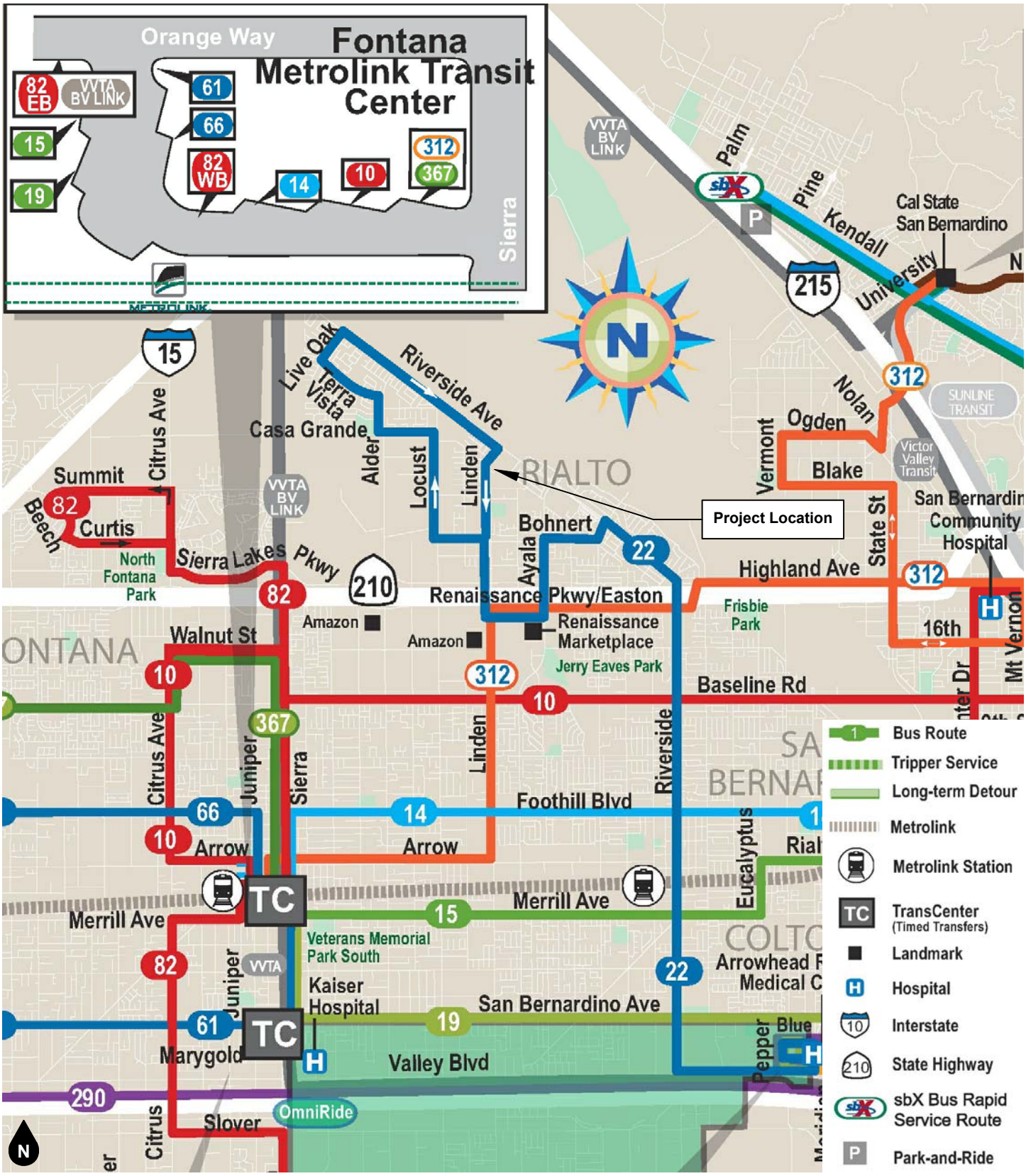


Figure 7
Existing Transit Routes

Source: Omnitrans

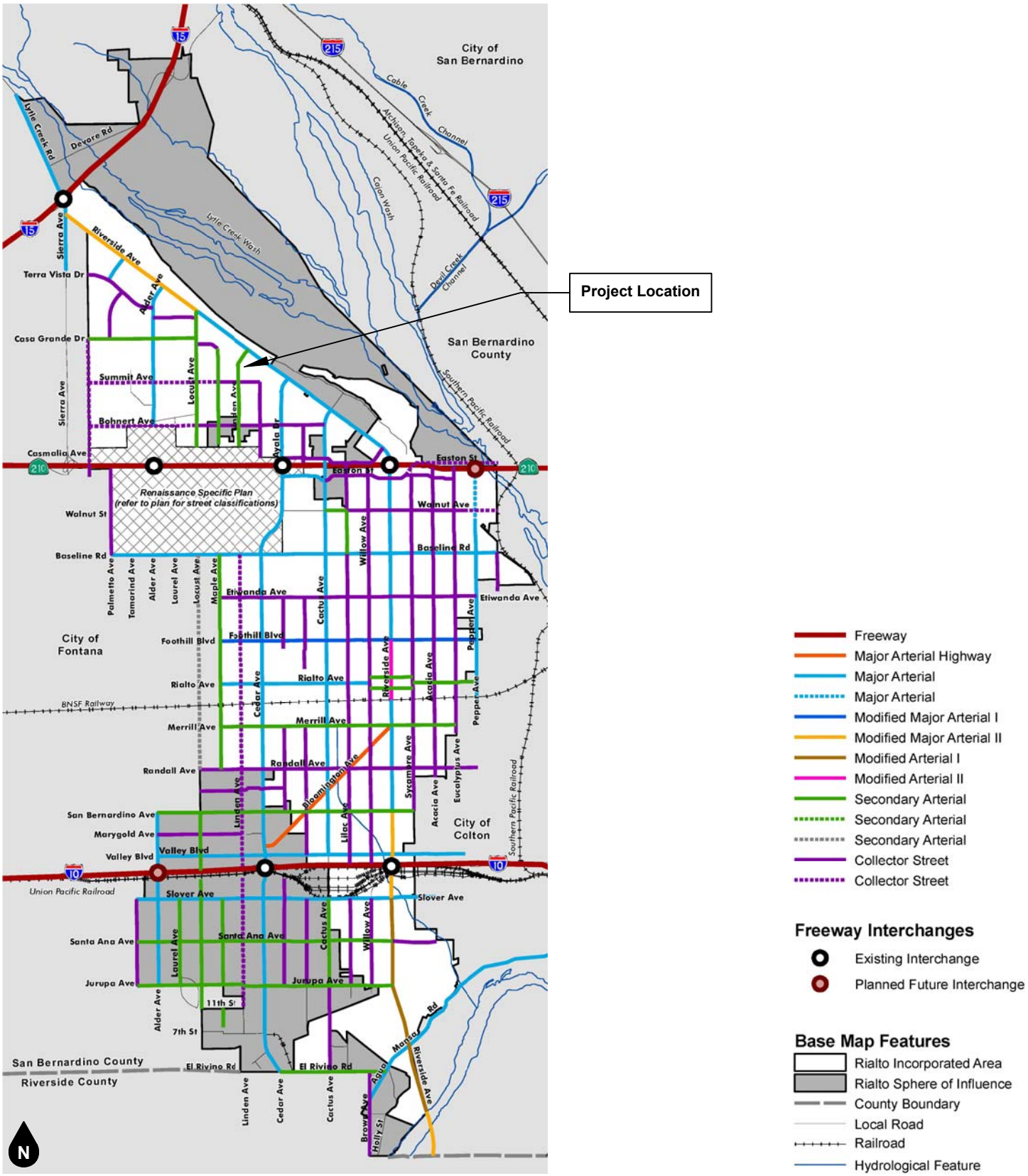
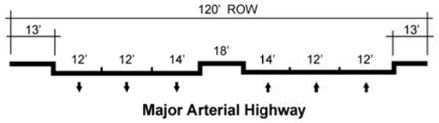


Figure 8
City of Rialto General Plan Circulation Element

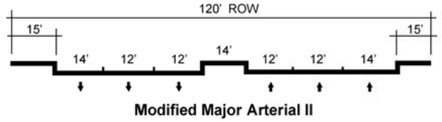
Source: City of Rialto



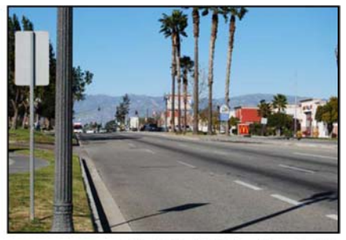
Major Arterial Highway



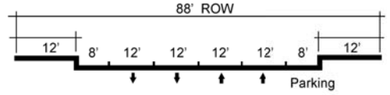
Major Arterial Highway



Modified Major Arterial II



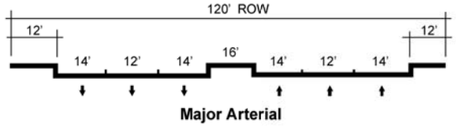
Modified Major Arterial II



Secondary Arterial



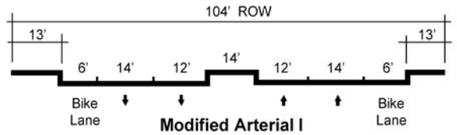
Secondary Arterial



Major Arterial



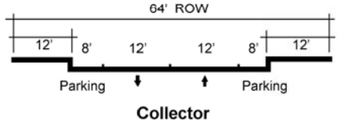
Major Arterial



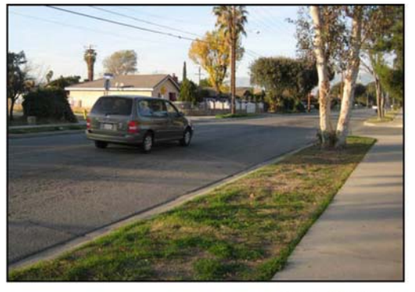
Modified Arterial I



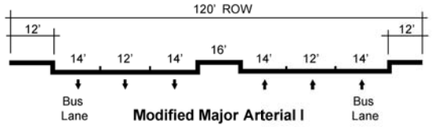
Modified Arterial I



Collector



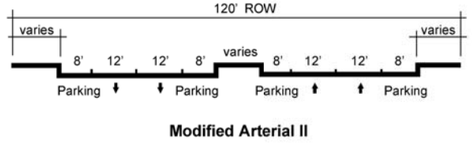
Collector Street



Modified Major Arterial I



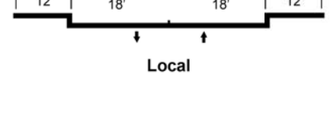
Modified Major Arterial I



Modified Arterial II



Modified Arterial II



Local



Local Street

Figure 8
City of Rialto General Plan Roadway Cross-Sections

Source: City of Rialto

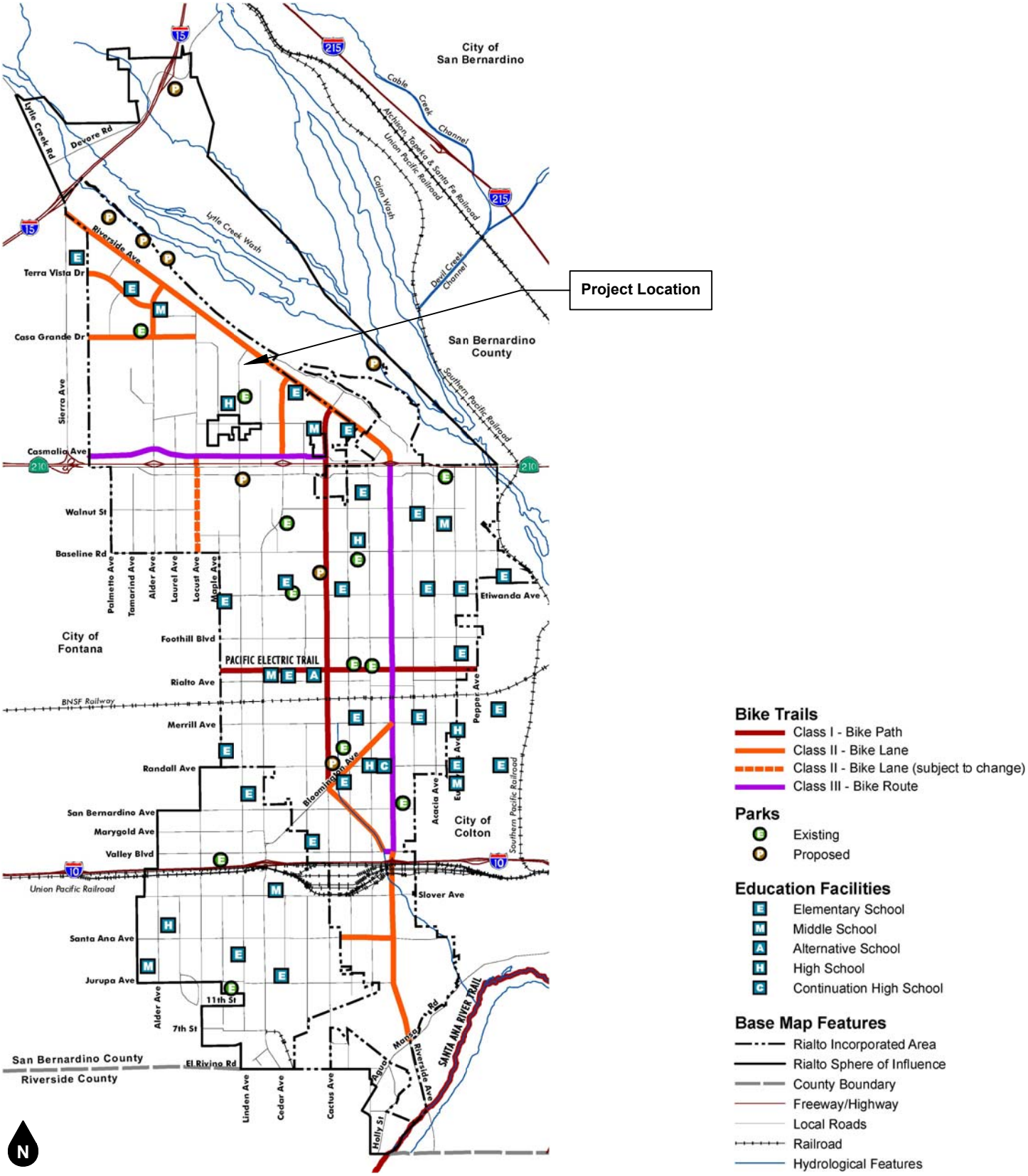


Figure 10
City of Rialto Bicycle Facilities Master Plan

Source: City of Rialto

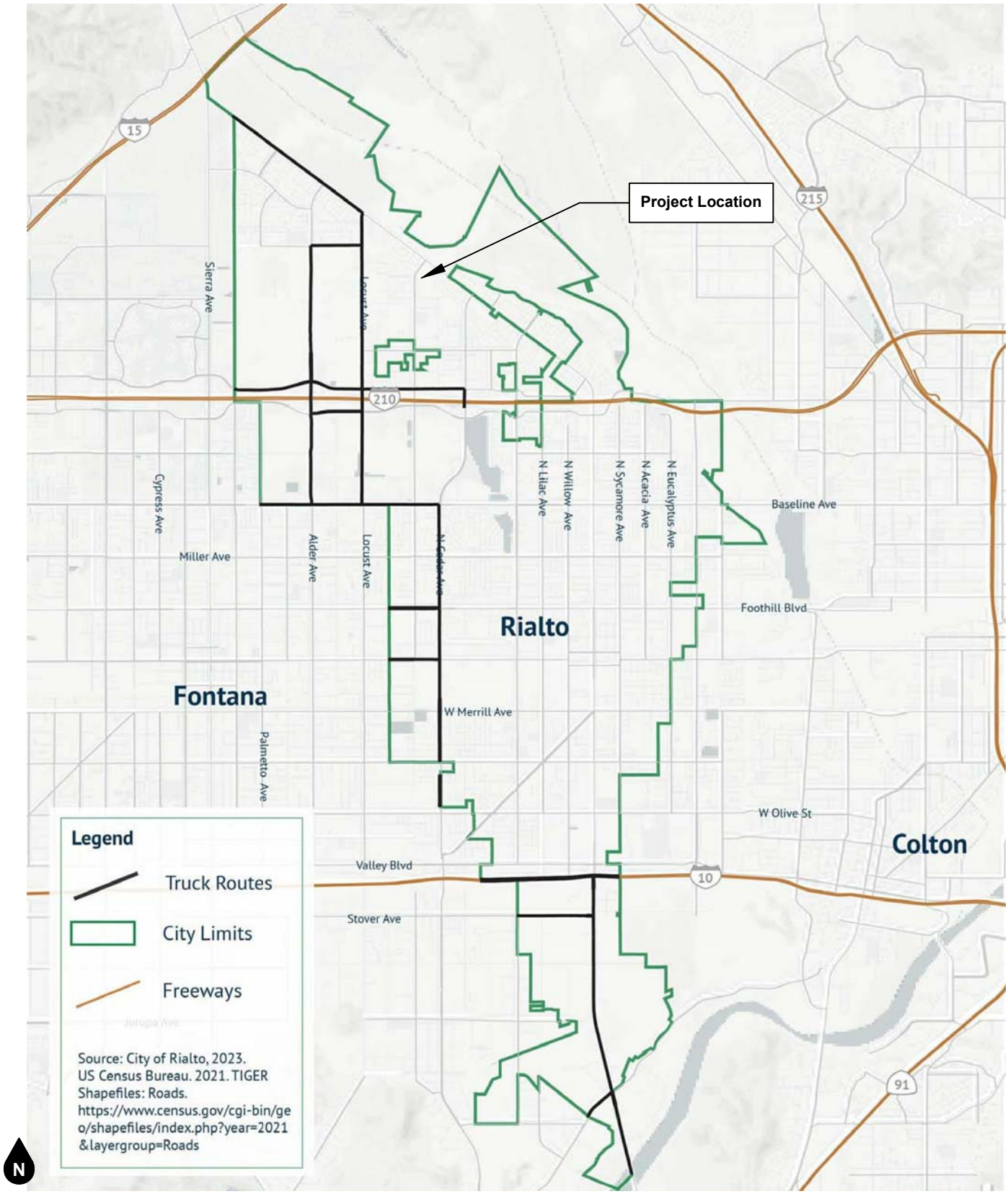


Figure 11
City of Rialto Designated Truck Routes

Source: City of Rialto

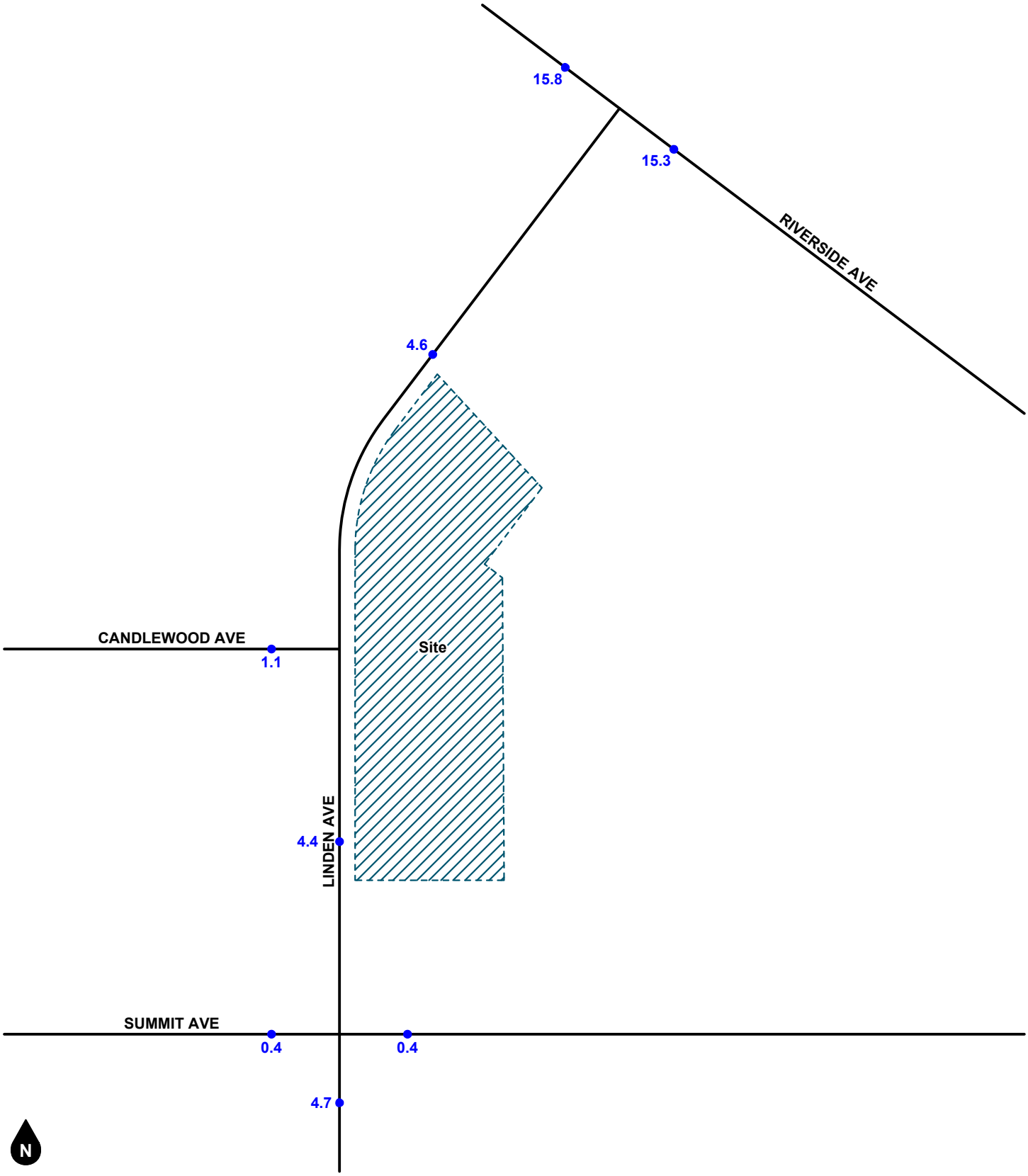


Figure 12
Existing Average Daily Traffic Volumes

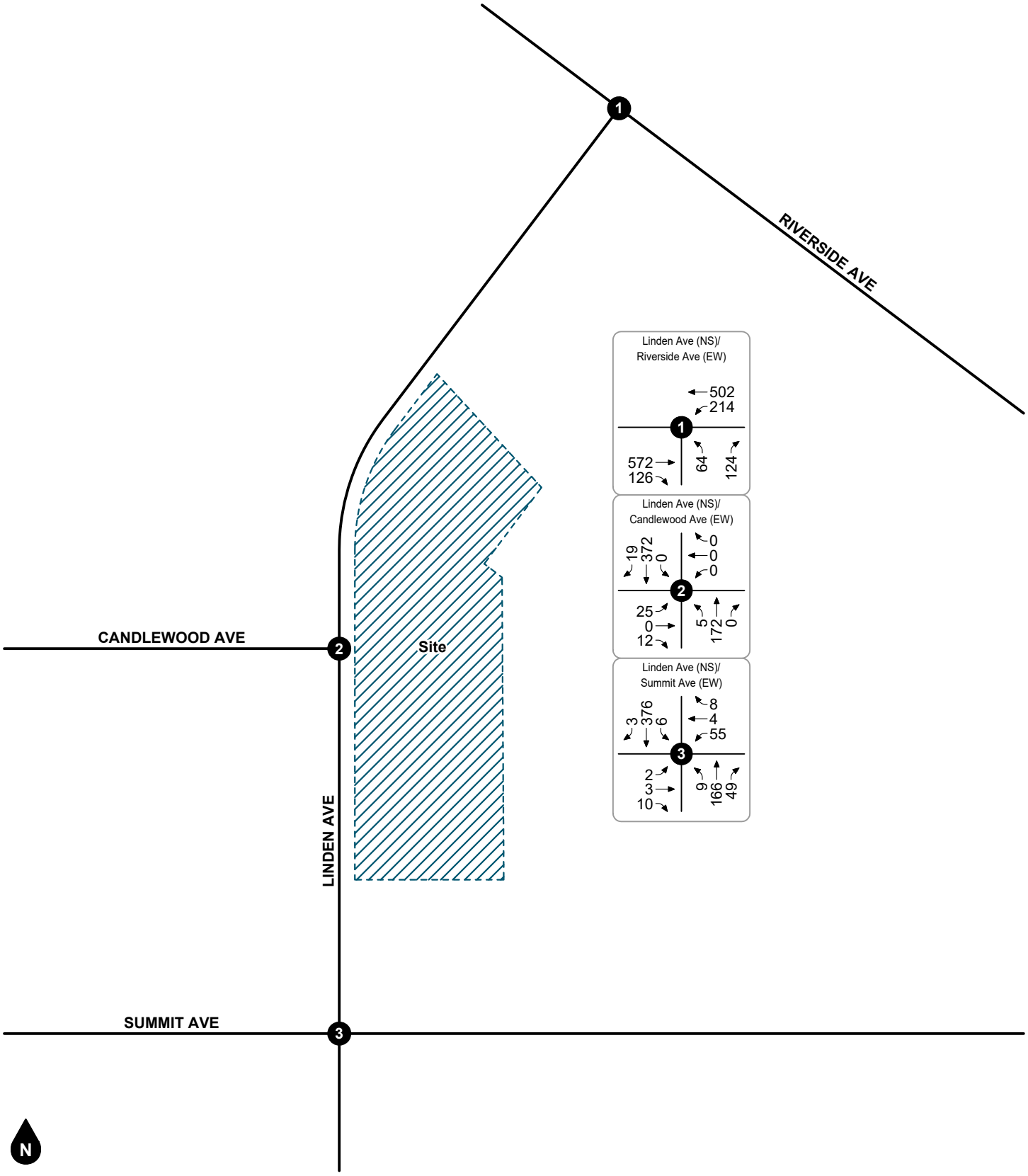


Figure 13
Existing AM Peak Hour Intersection Turning Movement Volumes

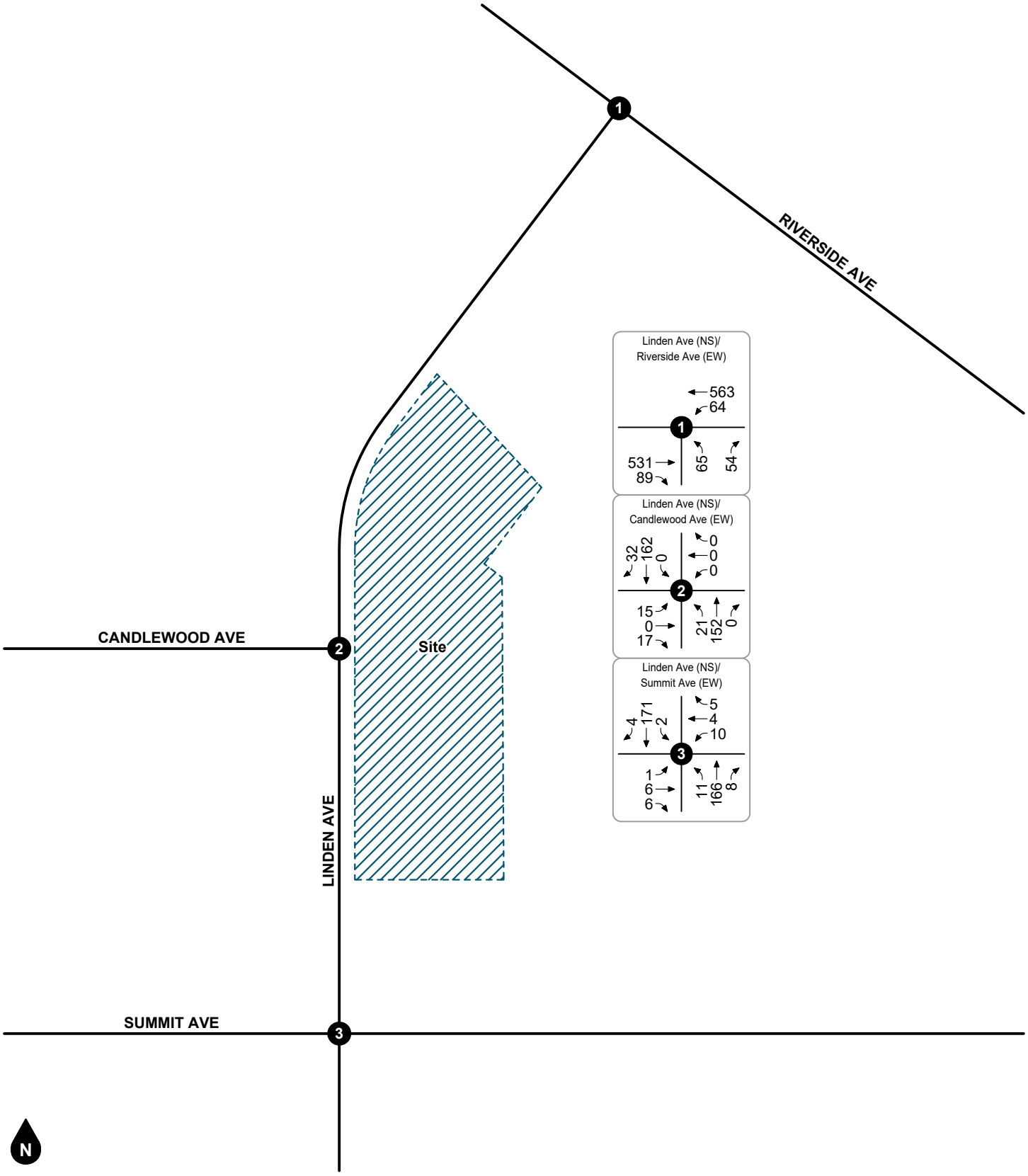


Figure 14
Existing PM Peak Hour Intersection Turning Movement Volumes

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 in the figures contained in this section.

PROJECT TRIP GENERATION

Table 3 shows the proposed project trip generation forecast is based on average rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021) for Land Use Code 210 (Single Family Detached Residential). This ITE Land Use Code was determined to adequately represent the land use for the proposed project and selected for calculation of the project trip generation forecast.

As illustrated in Table 3, the proposed project is forecast to generate a total of approximately 632 daily trips, including 47 trips during the AM peak hour and 63 trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION & ASSIGNMENT

Figure 15 and Figure 16 show the forecast outbound and inbound directional distribution patterns for the project generated trips, respectively. The project trip distribution patterns were developed in consultation with the City engineering staff using engineering judgment based on review of existing traffic data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, the number of trips generated is determined by multiplying the trip generation rates and directional distributions by the land use quantity. The project-generated average daily traffic volumes are shown on Figure 17. The project-generated AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 18 and Figure 19.

Table 3
Project Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Land Use Variable[2]	% In	% Out	Rate	% In	% Out	Rate	Daily Rate
Single-Family Detached Housing	ITE 210	DU	25%	75%	0.70	63%	37%	0.94	9.43

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Single-Family Detached Housing	ITE 210	67 DU	12	35	47	40	23	63	632

Notes:

1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting.
2. DU = Dwelling Unit.

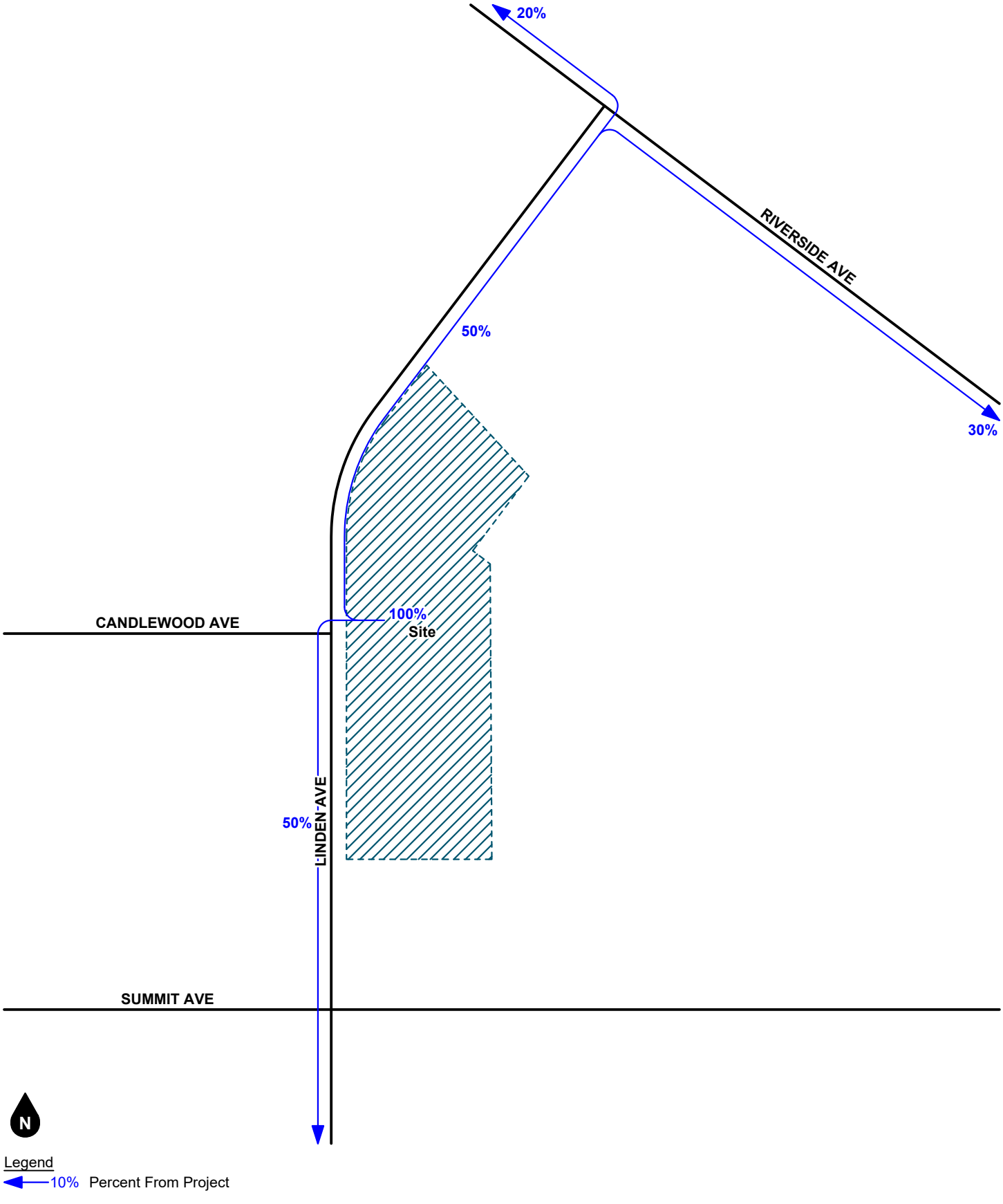


Figure 15
Project Trip Distribution (Outbound)

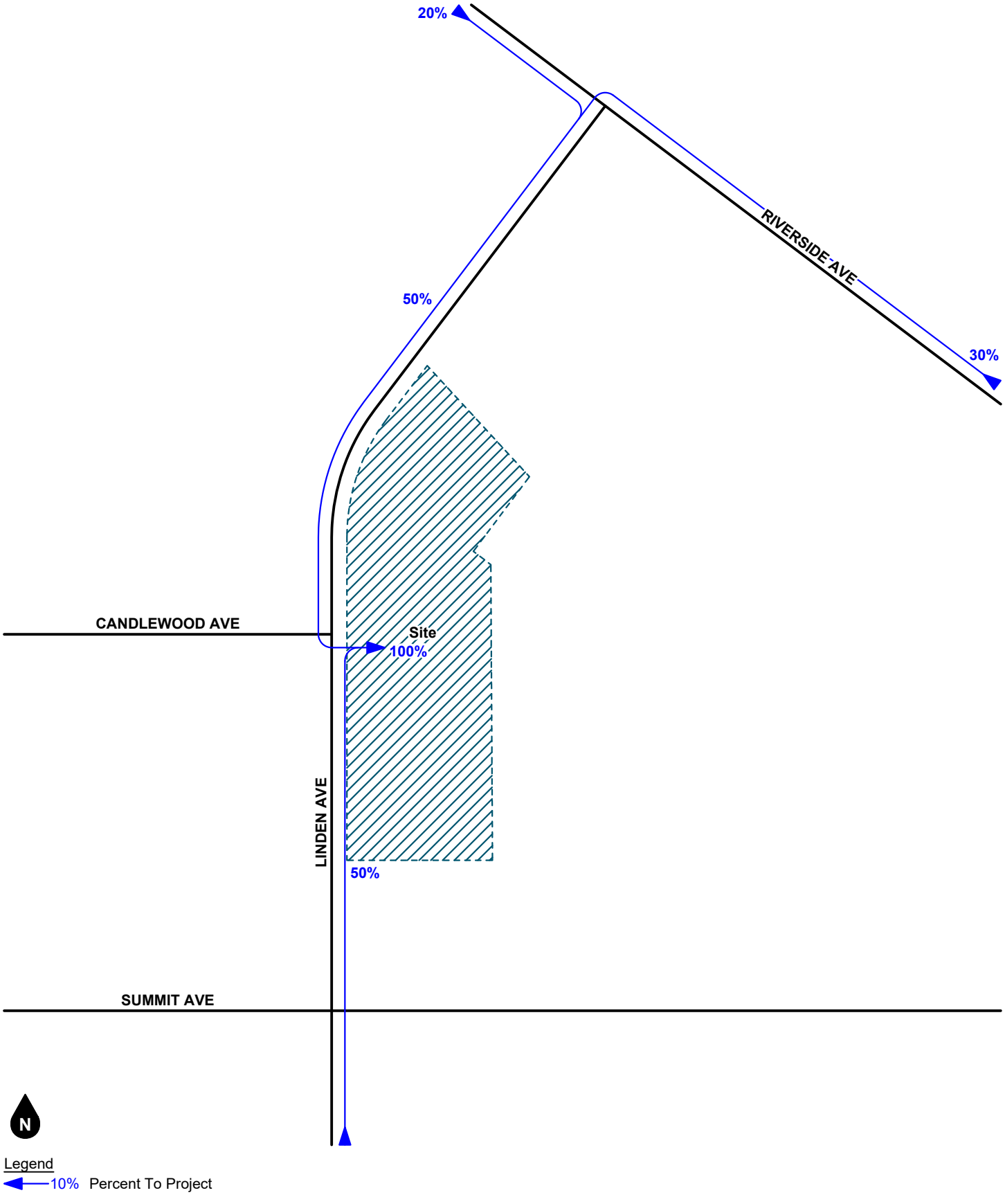
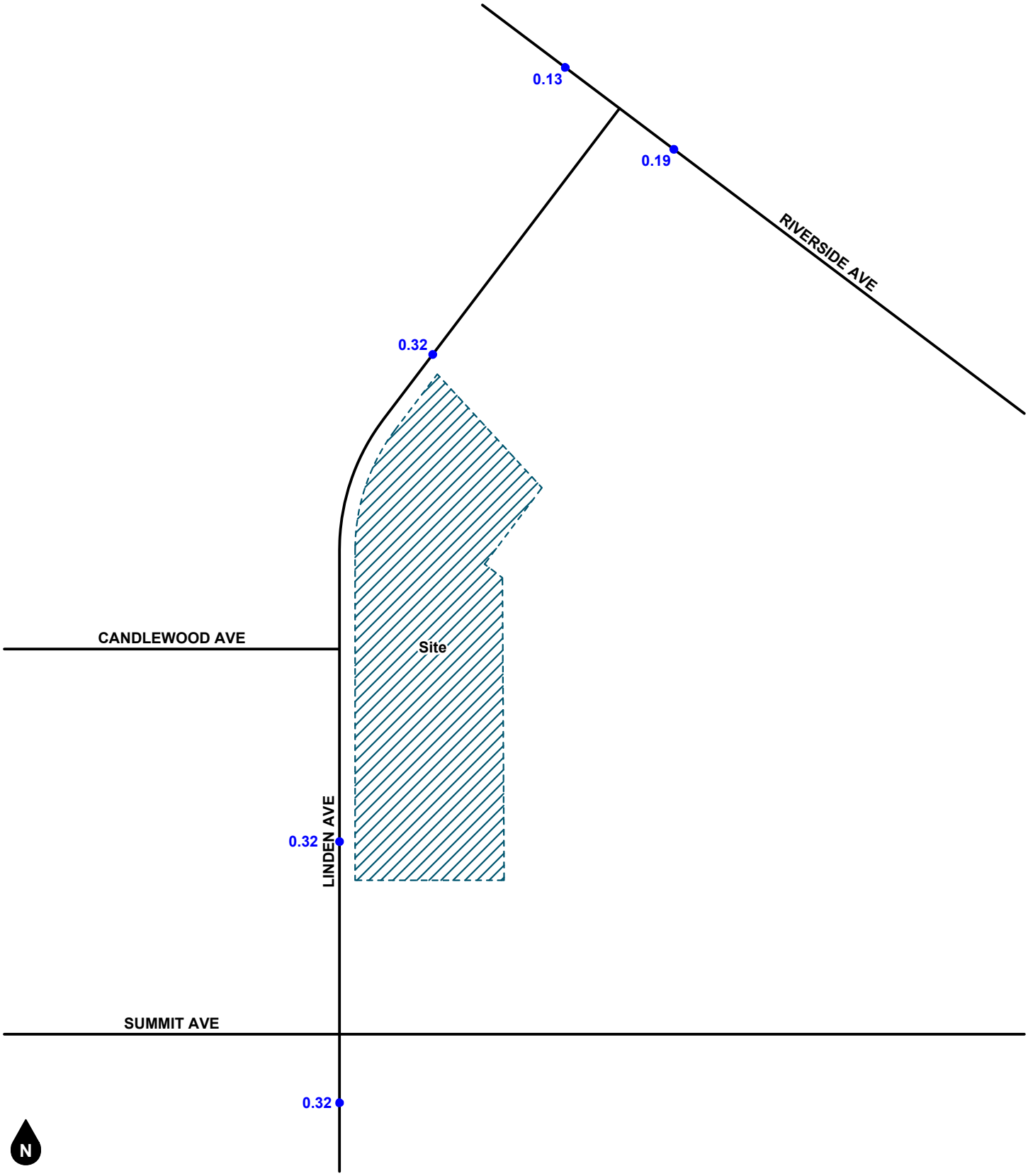


Figure 16
Project Trip Distribution (Inbound)



Legend
●## Vehicles Per Day (1,000's)

Figure 17
Project Average Daily Traffic Volumes

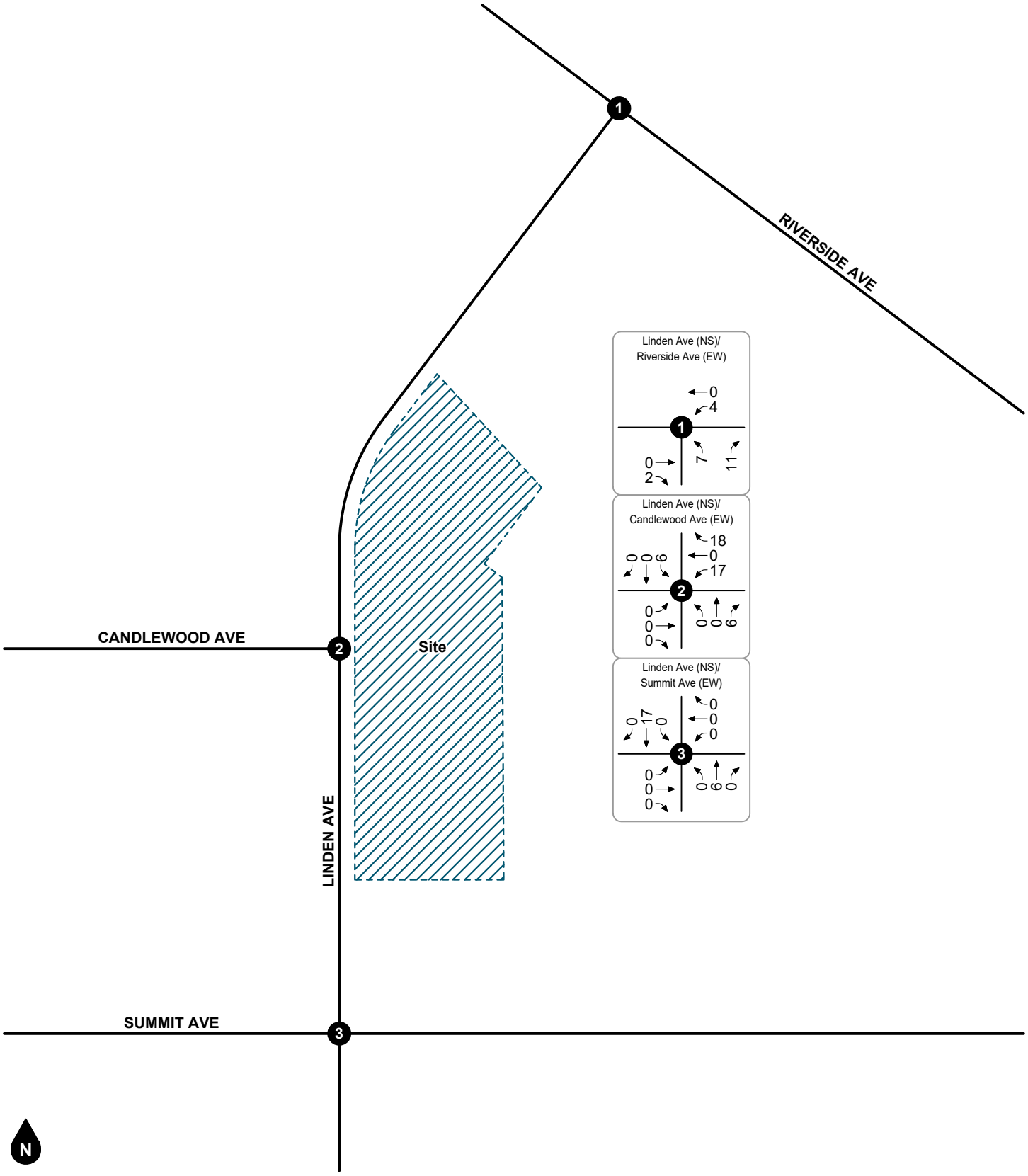


Figure 18
Project AM Peak Hour Intersection Turning Movement Volumes

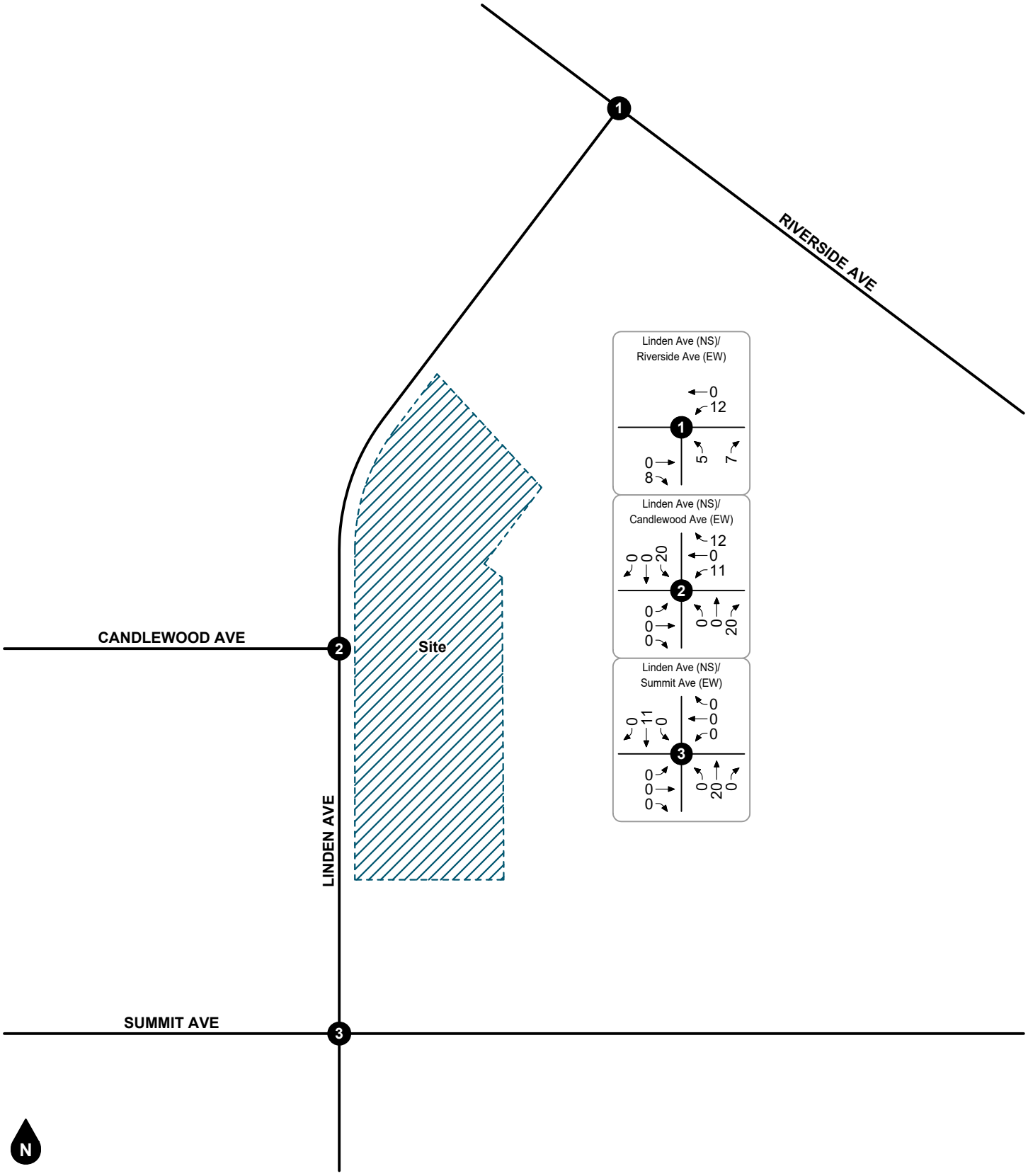


Figure 19
Project PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

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

METHOD OF PROJECTION

To assess future conditions, existing volumes were combined with project trips, ambient growth, and other development trips. The project completion date for analysis purposes in this report is 2028.

Ambient Growth

To account for ambient growth, Opening Year (2028) roadway volumes were developed by increasing existing (year 2025) volumes by a growth rate of two (2%) per year over a three (3) year period for a total growth factor of 1.06. The ambient growth was applied to all movements at the study intersections.

Other Developments

To account for growth associated with other development projects, trips generated by other pending or approved but unconstructed developments in the City of Rialto were reviewed and added to the study area as appropriate. The other development trip generation summary is shown in Table 4. The regional ambient growth is assumed to account for any additional trips generated by other developments not specifically listed in Table 4. Figure 20 shows the other development location map.

Average daily traffic volumes generated by other developments are shown on Figure 21. Figure 22 and Figure 23 show the forecast AM peak hour and PM peak hour intersection turning movement volumes for trips generated by other developments.

Regional Travel Demand Model Growth

Year 2050 AM and PM peak hour intersection turning movement volumes will be determined using the San Bernardino County Transportation Analysis Model (SBTAM) Year 2050 travel demand model plots and forecasting procedures outlined in the National Cooperative Highway Research Program Report 255.

To derive AM and PM peak hour intersection turning movement volumes, the traffic volume growth forecasts were further refined using a spreadsheet program developed by the Federal Highway Administration and consistent with traffic volume forecasting procedures outlined in the National Cooperative Highway Research Program Report 255. The spreadsheet program uses a linear programming algorithm to calculate future turning movements based on the relationship of existing intersection turning movements and forecast model growth. The forecast turning movements developed by the spreadsheet program were reviewed for reasonableness and adjusted as necessary to ensure growth over near-term forecasts. The end results of the post-processing procedures are future intersection turning movement volumes suitable for analysis. Travel demand model post-processing worksheets are provided in Appendix E

ANALYSIS SCENARIO VOLUMES

Existing Plus Ambient Growth

The Existing Plus Ambient Growth volume forecast was developed by applying the ambient growth factor to Existing volumes. Existing Plus Ambient Growth average daily traffic volumes are shown on Figure 24. Existing Plus Ambient Growth AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 25 and Figure 26.

Existing Plus Ambient Growth Plus Project

The Existing Plus Ambient Growth Plus Project volume forecast was developed by adding project-generated trips to the Existing Plus Ambient Growth volumes. Existing Plus Ambient Growth Plus Project average daily traffic volumes are shown on Figure 27. Existing Plus Ambient Growth Plus Project AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 28 and Figure 29.

Opening Year (2028) Without Project

The Opening Year (2028) Without Project volume forecast was developed by applying the ambient growth factor to existing volumes and adding trips generated by other developments. Opening Year (2028) Without Project average daily traffic volumes are shown on Figure 30. Opening Year (2028) Without Project AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 31 and Figure 32.

Opening Year (2028) With Project

The Opening Year (2028) With Project volume forecast was developed by adding project-generated trips to the Opening Year (2028) Without Project volumes. Opening Year (2028) With Project average daily traffic volumes are shown on Figure 33. Opening Year (2028) With Project AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 34 and Figure 35.

Year 2050 Without Project

The Year 2050 Without Project volume forecast was developed based on the regional travel demand model growth as described above. Year 2050 Without Project average daily traffic volumes are shown on Figure 36. Year 2050 Without Project AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 37 and Figure 38.

Year 2050 With Project

The Year 2050 With Project volume forecast was developed by adding project-generated trips to the Year 2050 Without Project volumes. Year 2050 With Project average daily traffic volumes are shown on Figure 39. Year 2050 With Project AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 40 and Figure 41.

Table 4
Other Development Trip Generation

Trips Generated											
					AM Peak Hour			PM Peak Hour			
ID	Name/Address	Land Use	Source[1]	Quantity[2]	In	Out	Total	In	Out	Total	Daily
1	223 Locust Avenue[1]	Warehousing	ITE 150	191.000 TSF							
		Cars		PCE	15	5	20	6	15	21	196
		Trucks		PCE	27	8	35	11	27	38	355
		Subtotal		PCE	42	13	55	17	42	59	551

Notes:

1. Source: Locust Avenue Industrial Building Transportation Impact Analysis, Stantec, June 20, 2023.
2. TSF = Thousand Square Feet.
3. PCE = passenger car equivalent. PCE factors are based on the *City of Rialto Traffic Impact Analysis Report Guidelines for Vehicle Miles Traveled (VMT) and Level of Service (LOS) Assessment December, 2024.*

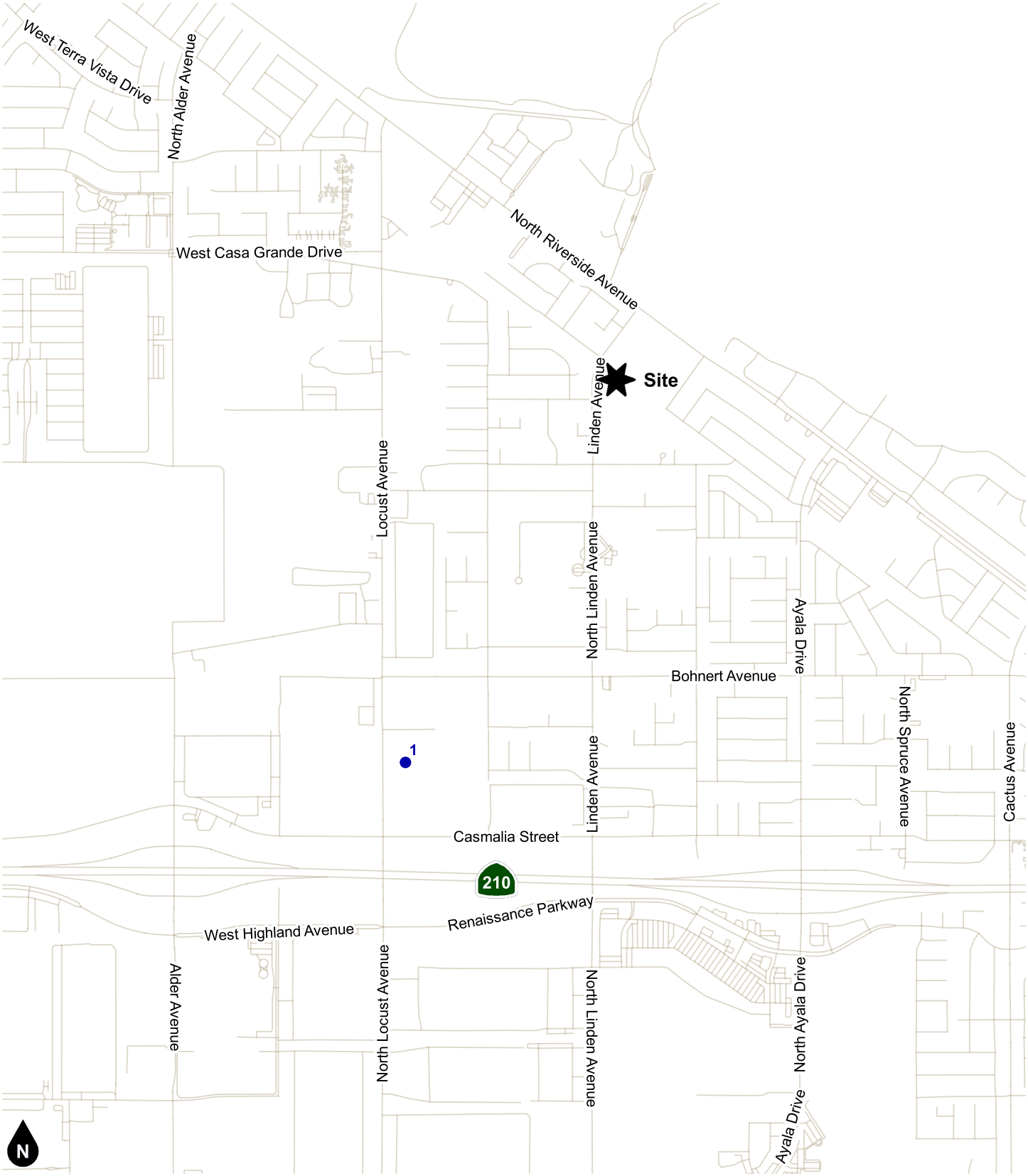


Figure 20
Other Development Location Map

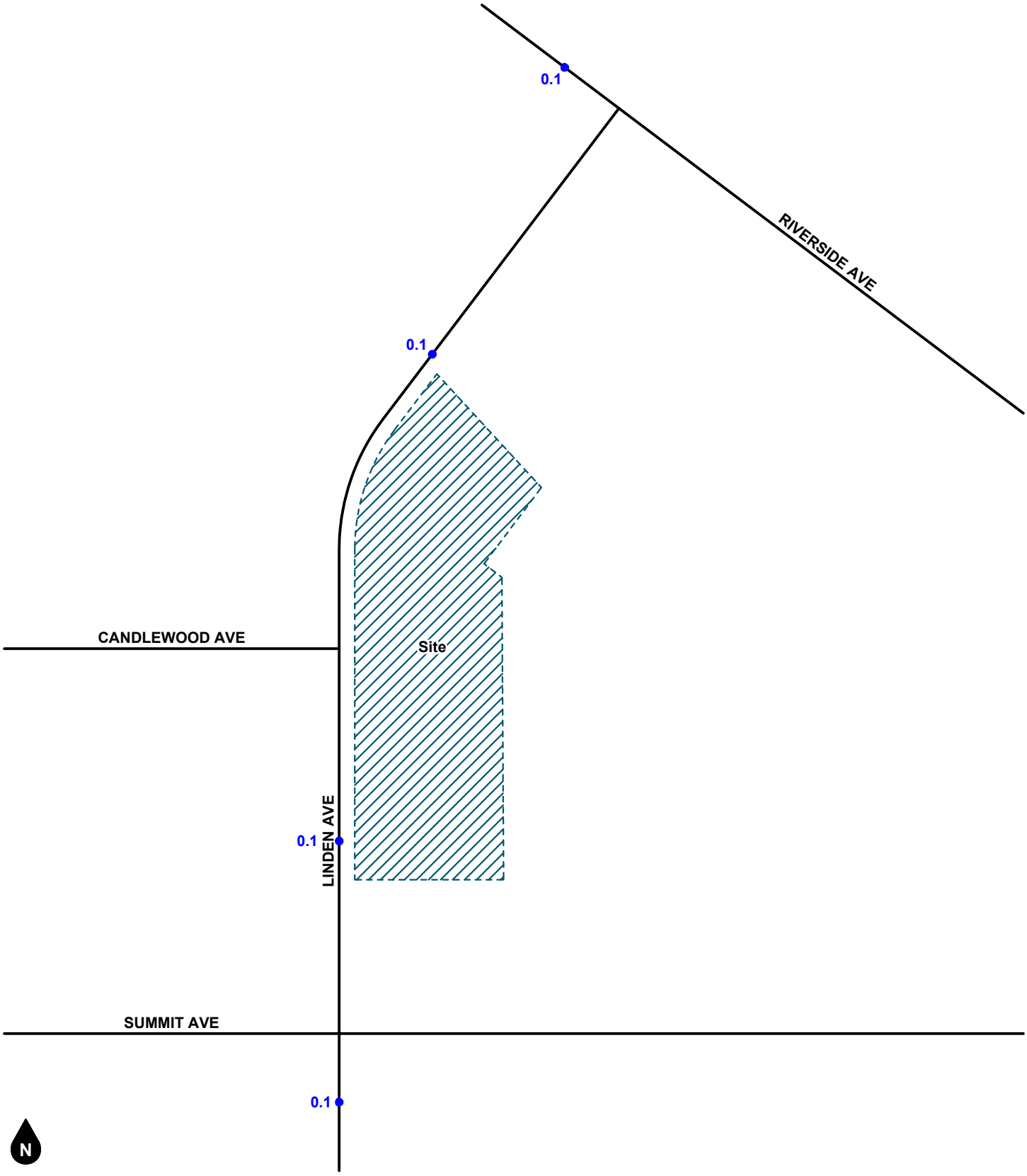


Figure 21
Other Development Average Daily Traffic Volumes

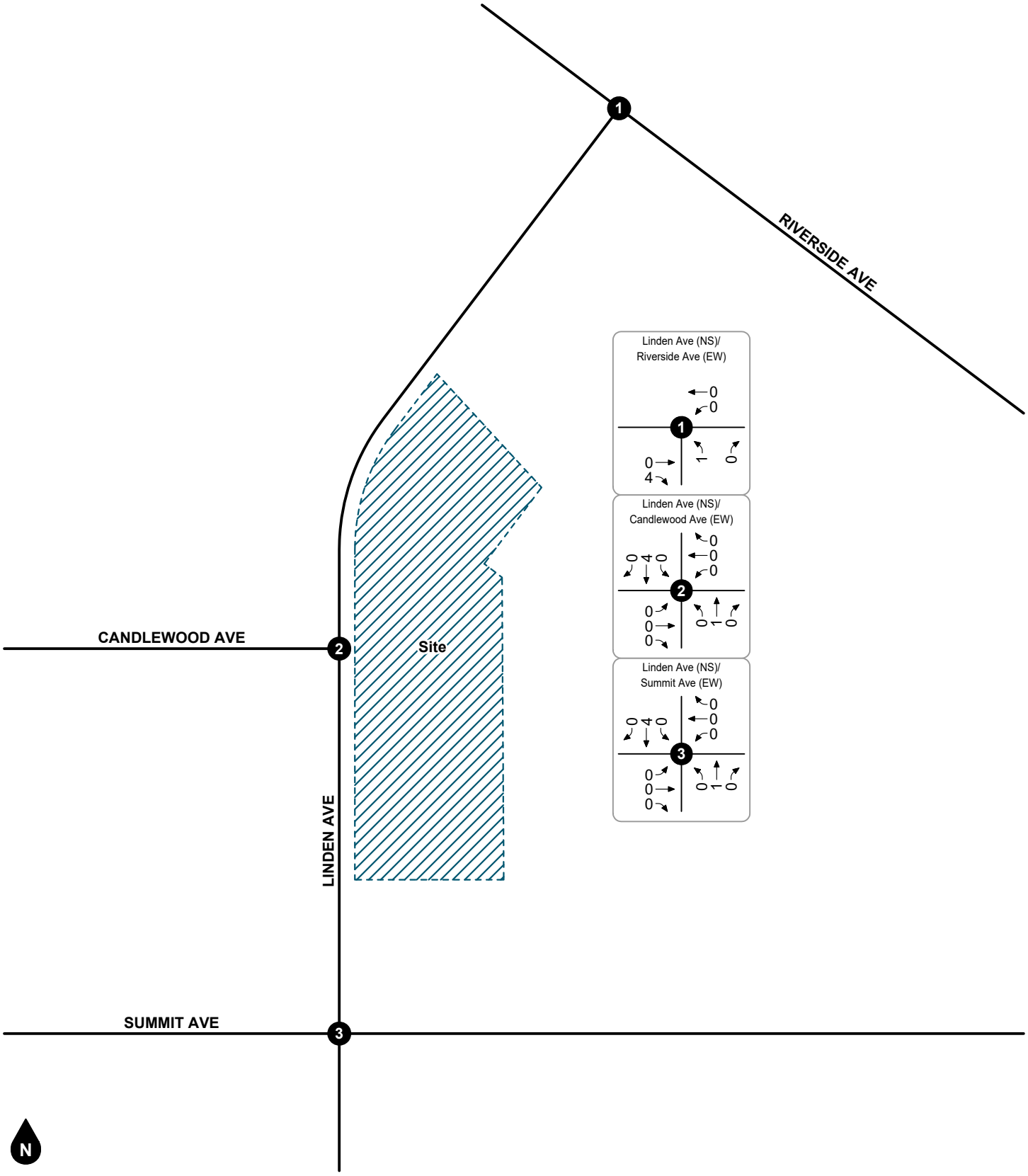


Figure 22
Other Development
AM Peak Hour Intersection Turning Movement Volumes

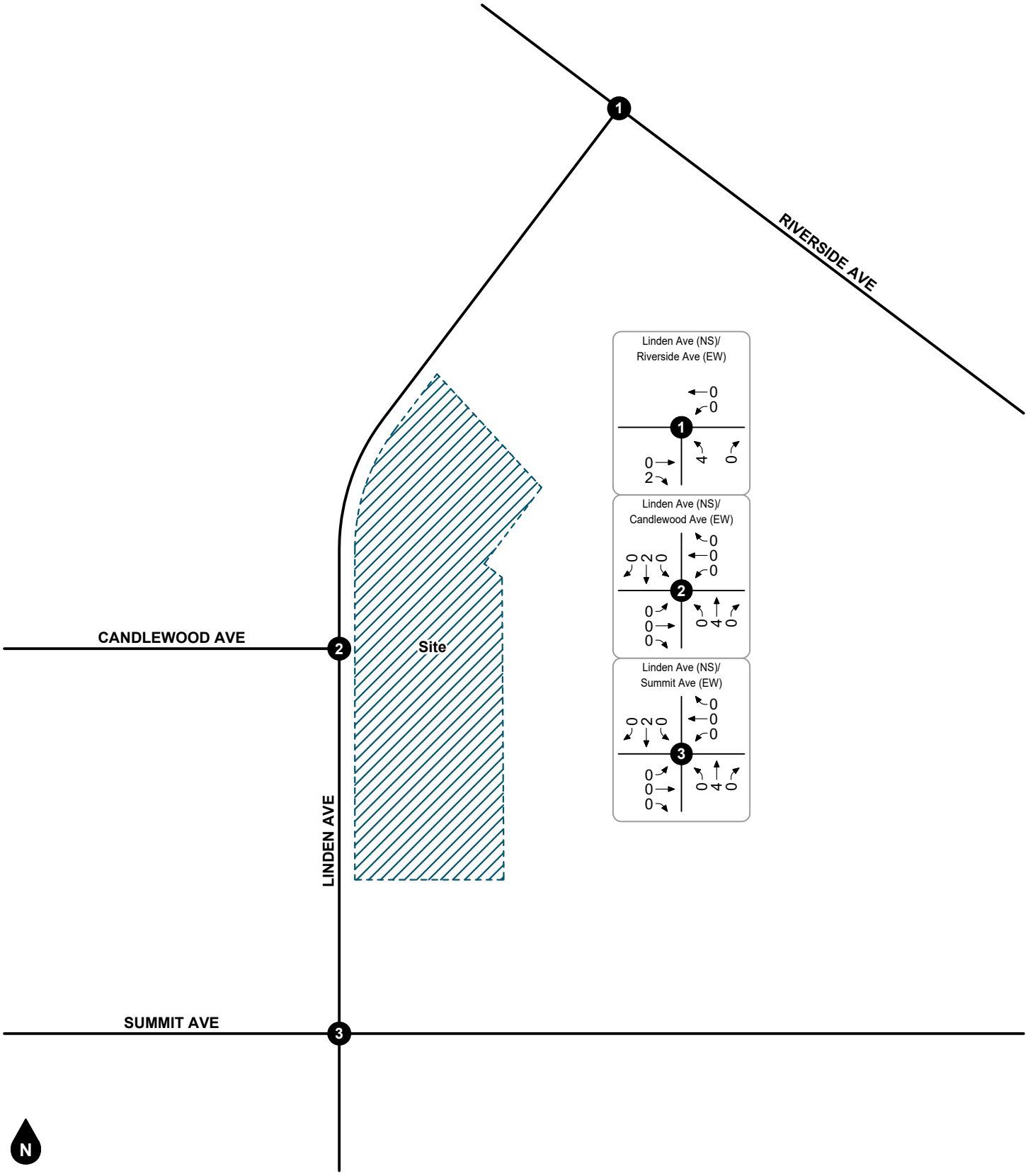
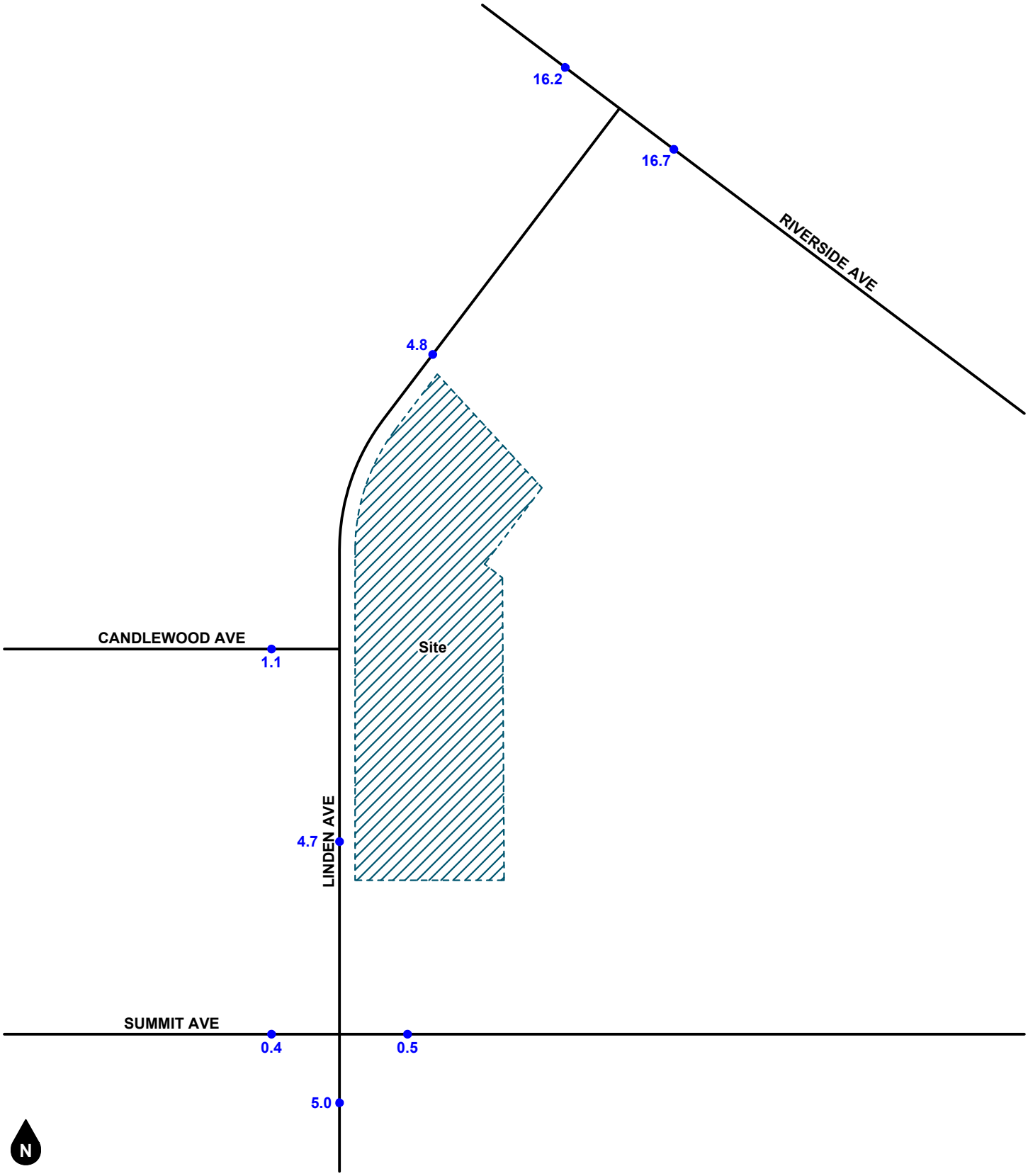


Figure 23
Other Development
PM Peak Hour Intersection Turning Movement Volumes



Legend
●## Vehicles Per Day (1,000's)

Figure 24
Existing Plus Ambient Growth Average Daily Traffic Volumes

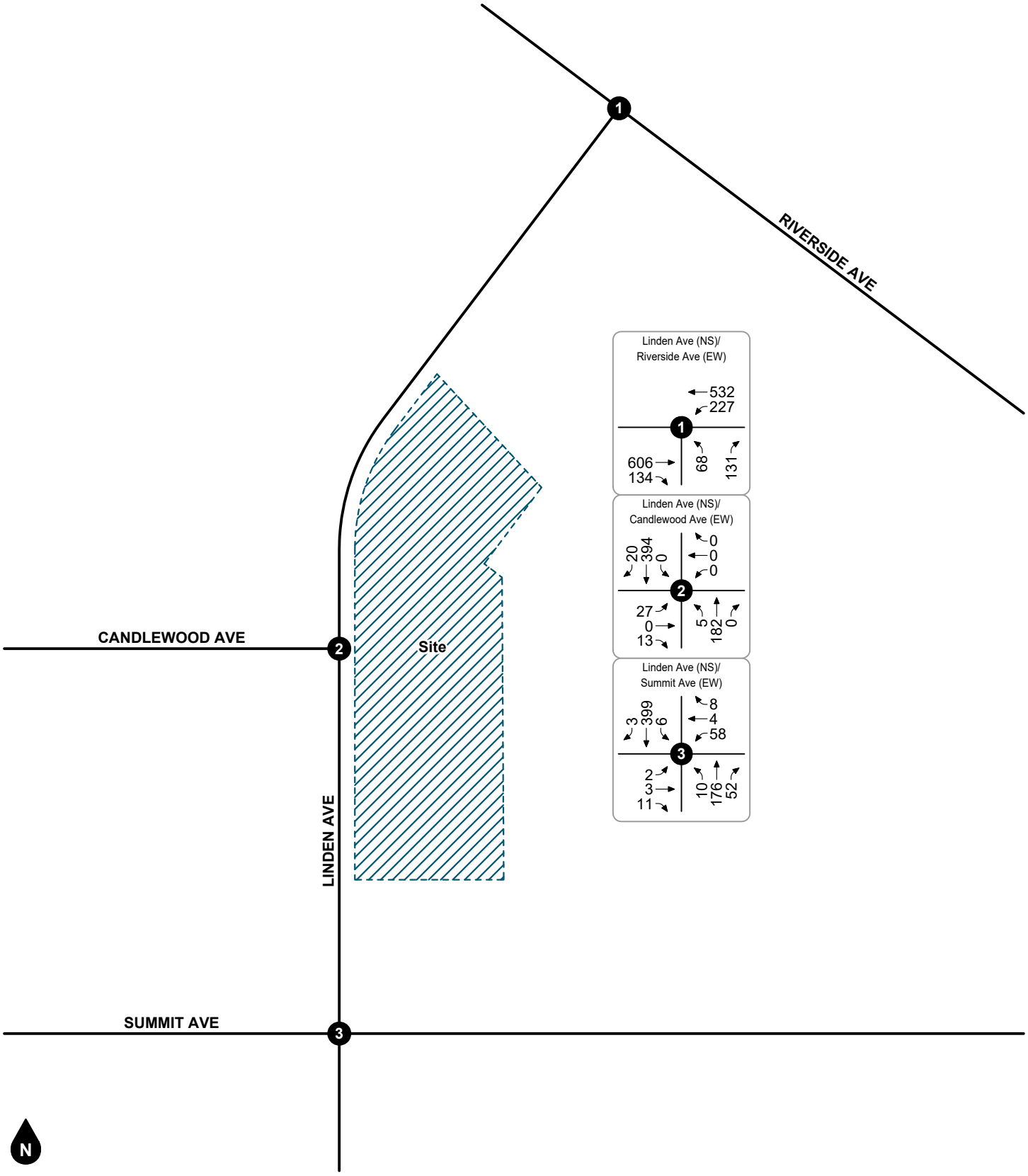


Figure 25
Existing Plus Ambient Growth
AM Peak Hour Intersection Turning Movement Volumes

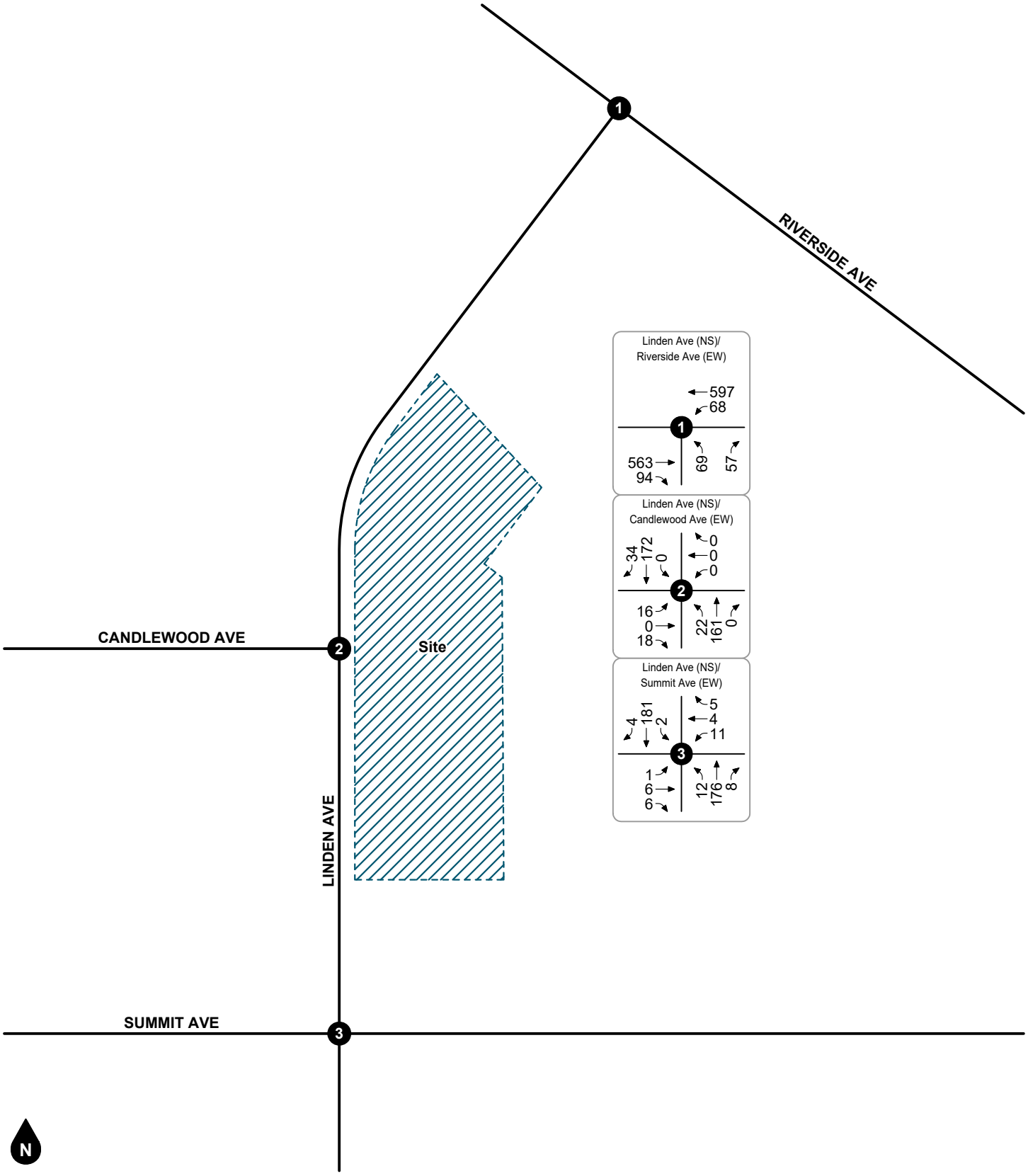
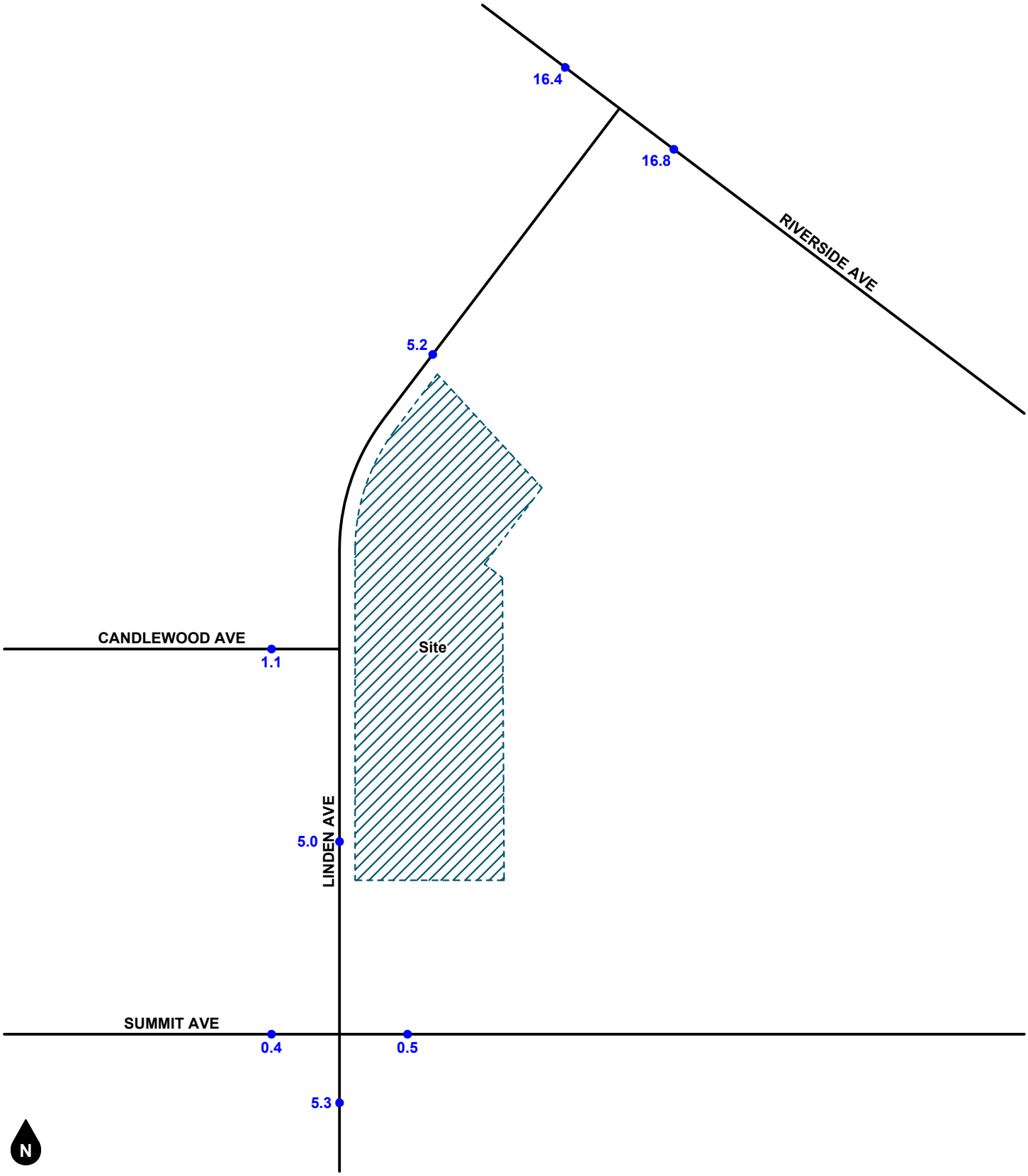


Figure 26
Existing Plus Ambient Growth
PM Peak Hour Intersection Turning Movement Volumes



Legend
●## Vehicles Per Day (1,000's)

Figure 27
Existing Plus Ambient Growth Plus Project
Average Daily Traffic Volumes

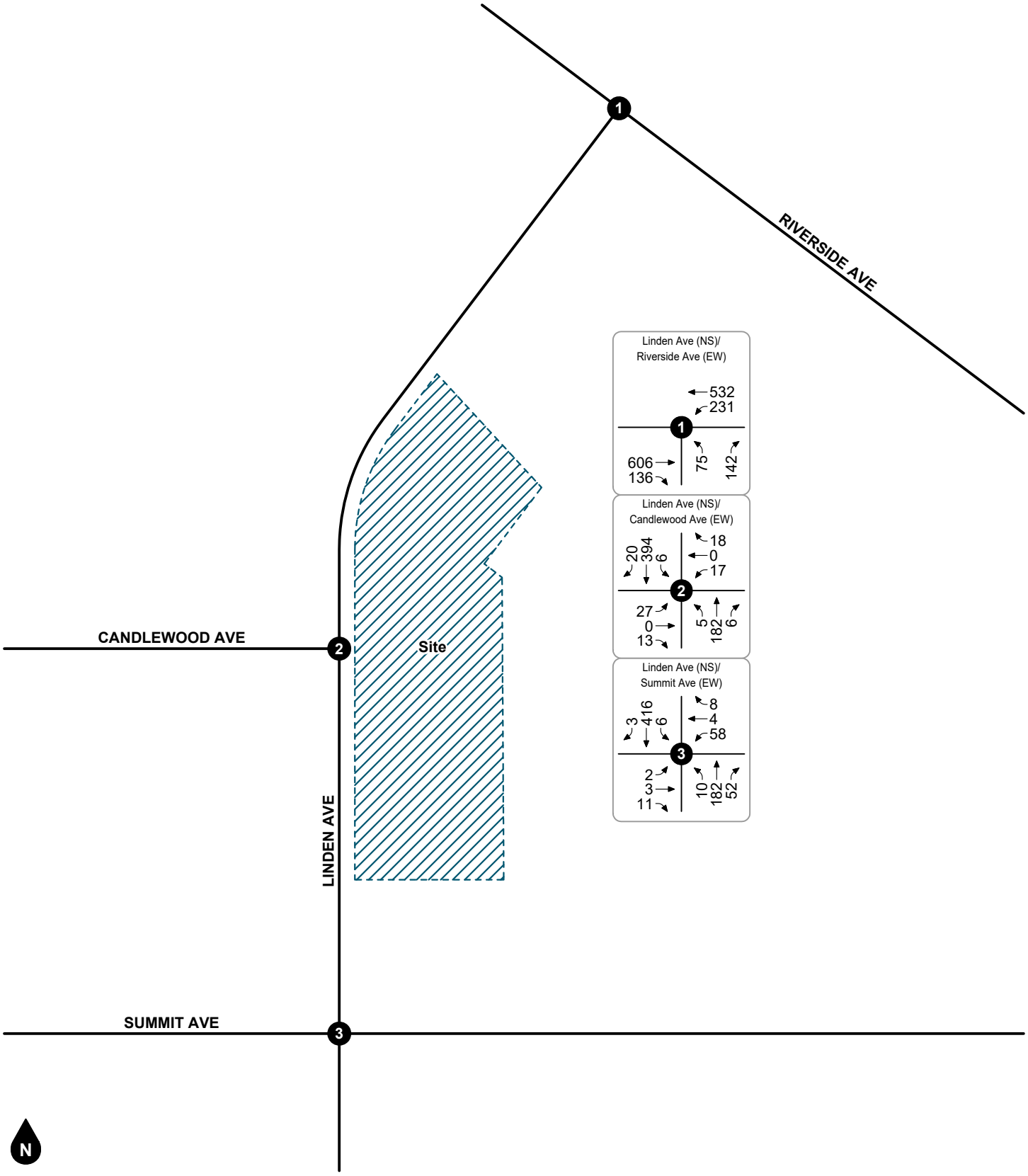


Figure 28
Existing Plus Ambient Growth Plus Project
AM Peak Hour Intersection Turning Movement Volumes

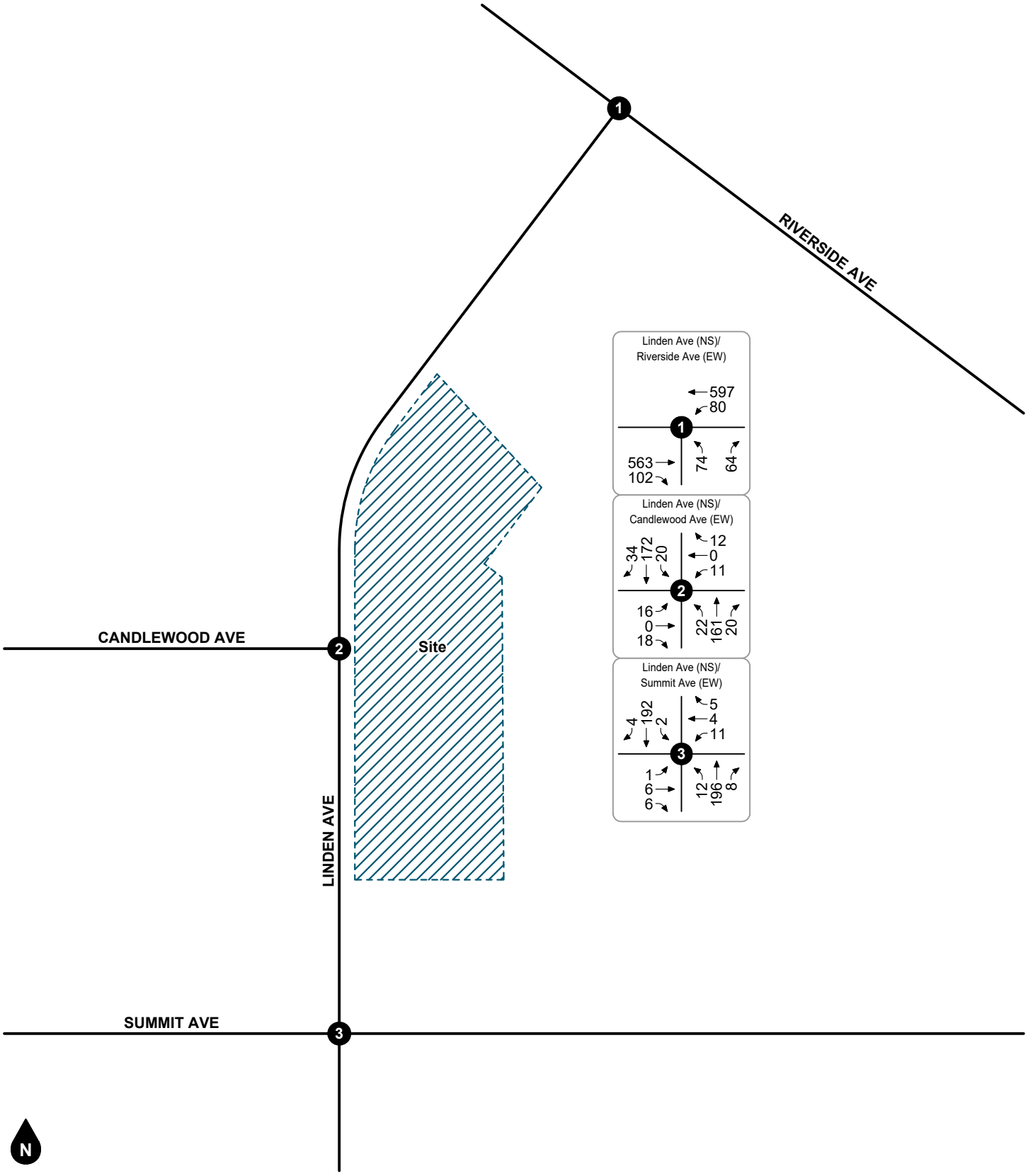
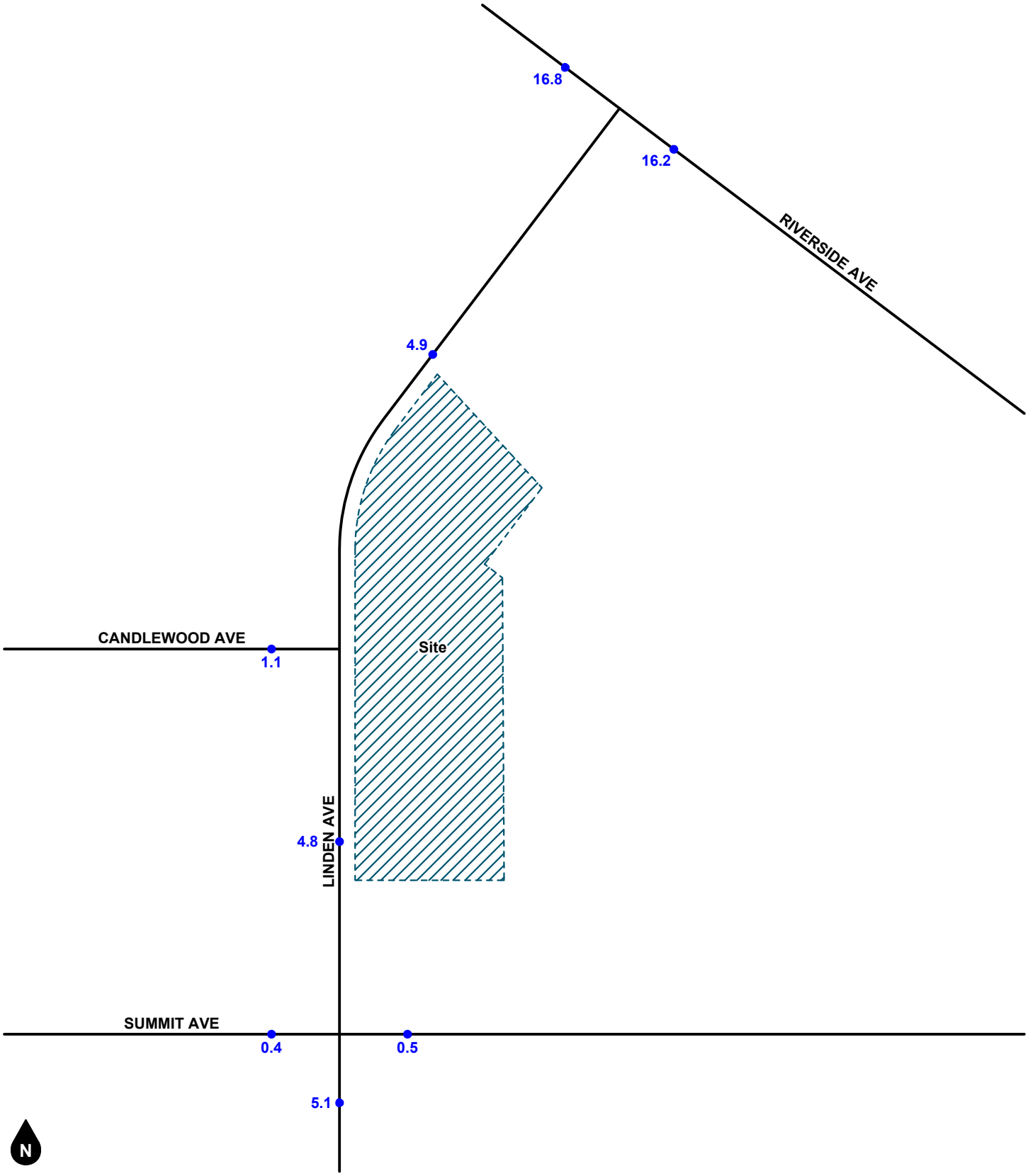


Figure 29
Existing Plus Ambient Growth Plus Project
PM Peak Hour Intersection Turning Movement Volumes



Legend
●## Vehicles Per Day (1,000's)

Figure 30
Opening Year (2028) Without Project
Average Daily Traffic Volumes

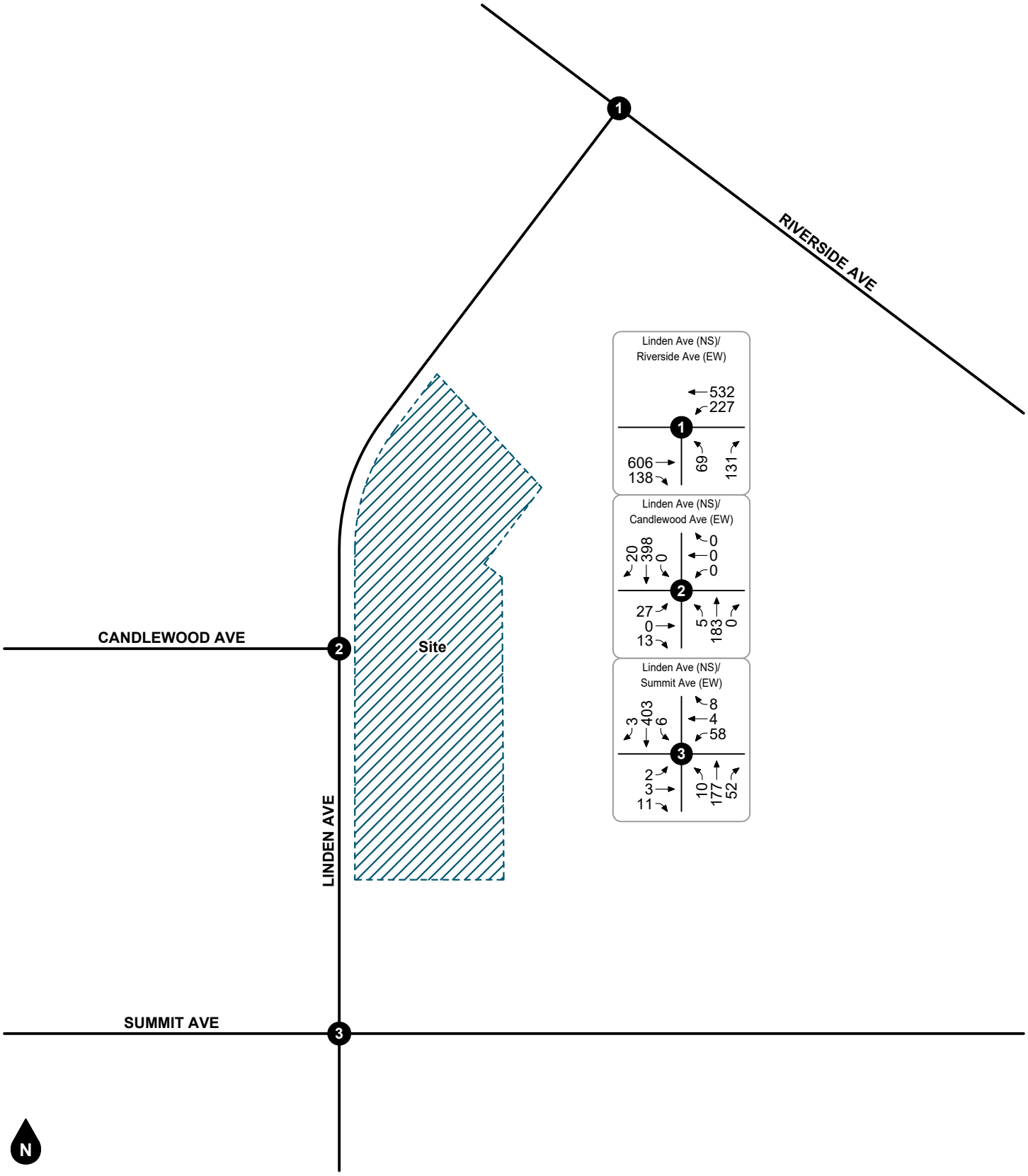


Figure 31
Opening Year (2028) Without Project
AM Peak Hour Intersection Turning Movement Volumes

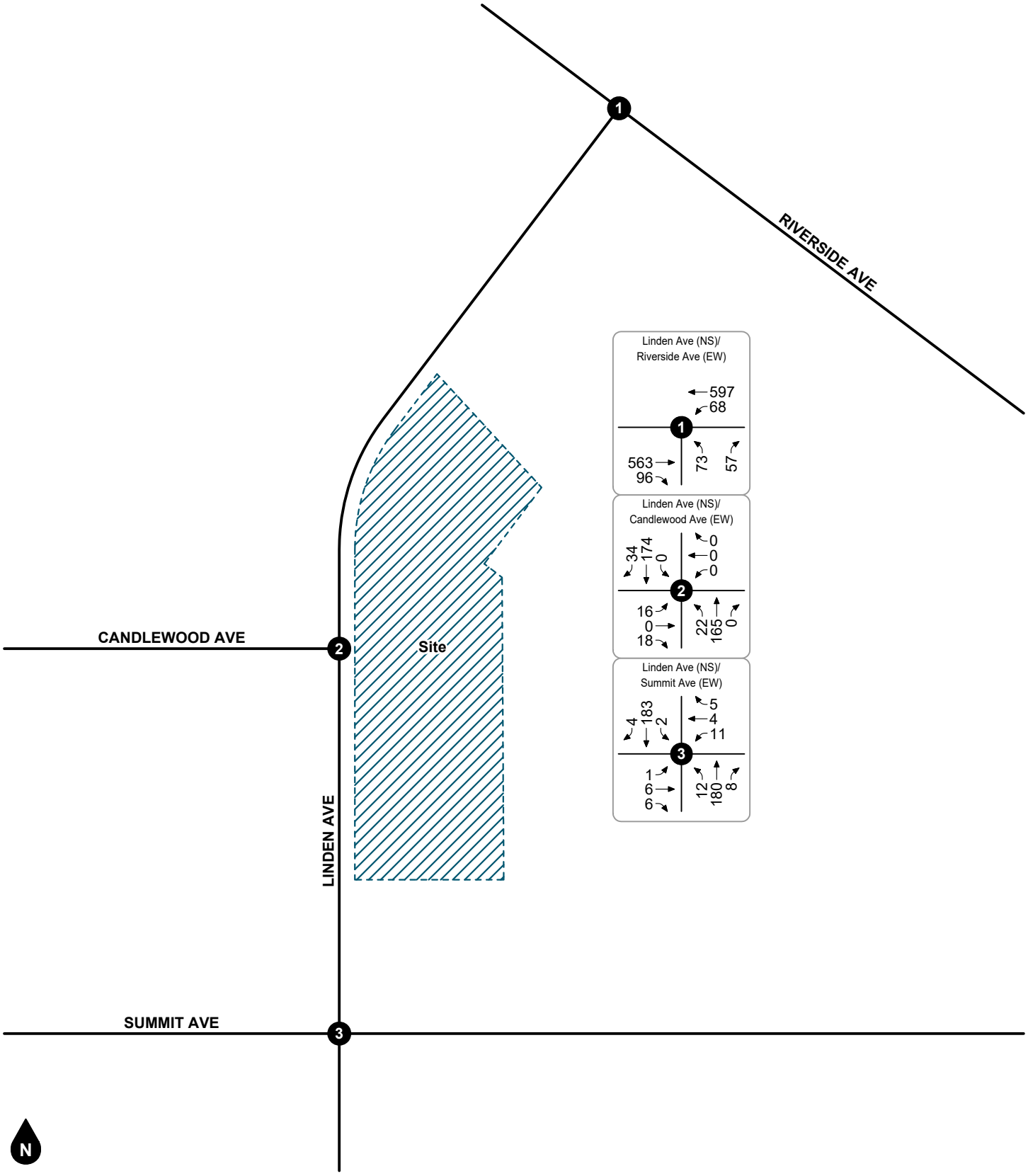
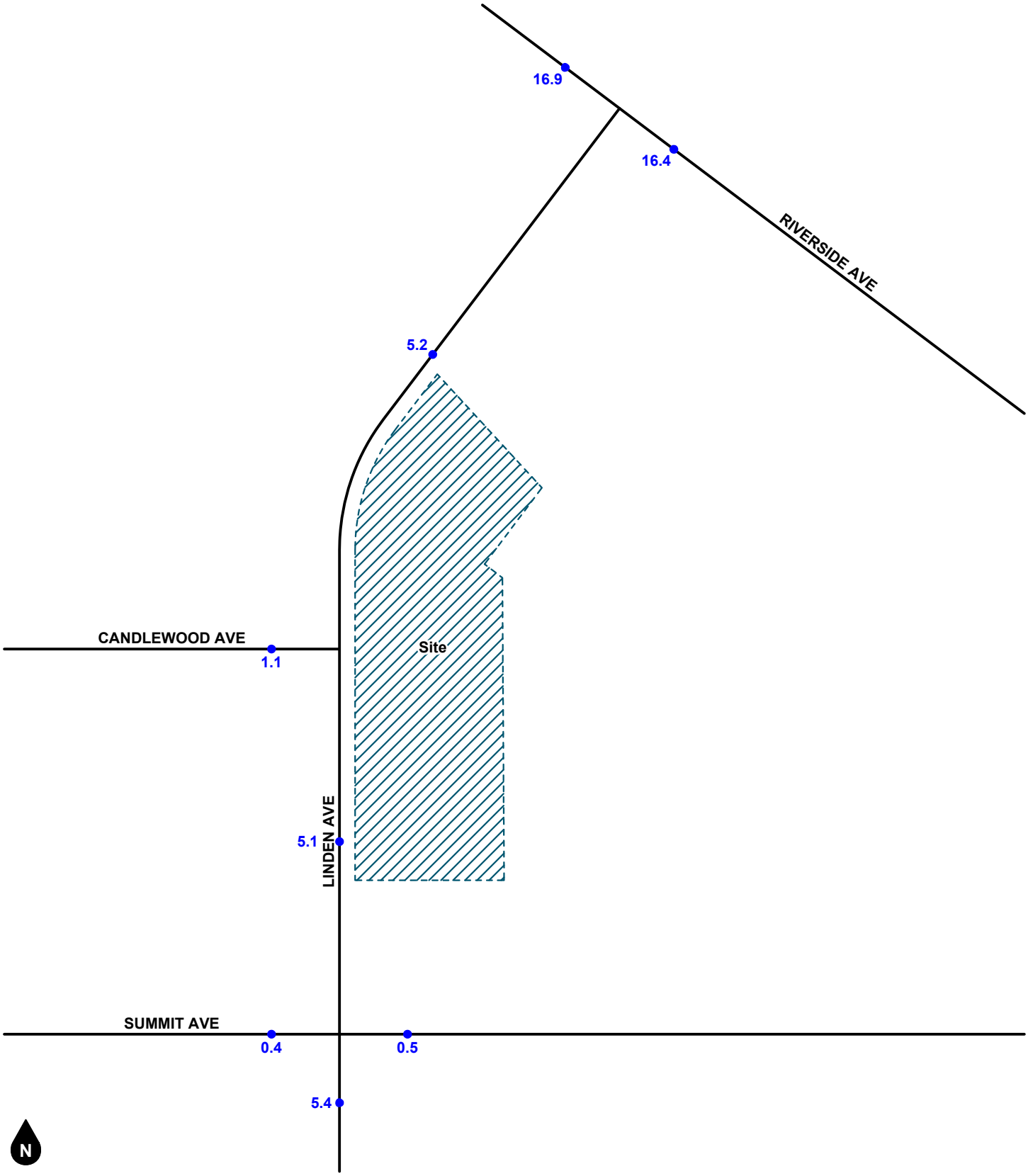


Figure 32
Opening Year (2028) Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend
●## Vehicles Per Day (1,000's)

Figure 33
Opening Year (2028) With Project
Average Daily Traffic Volumes

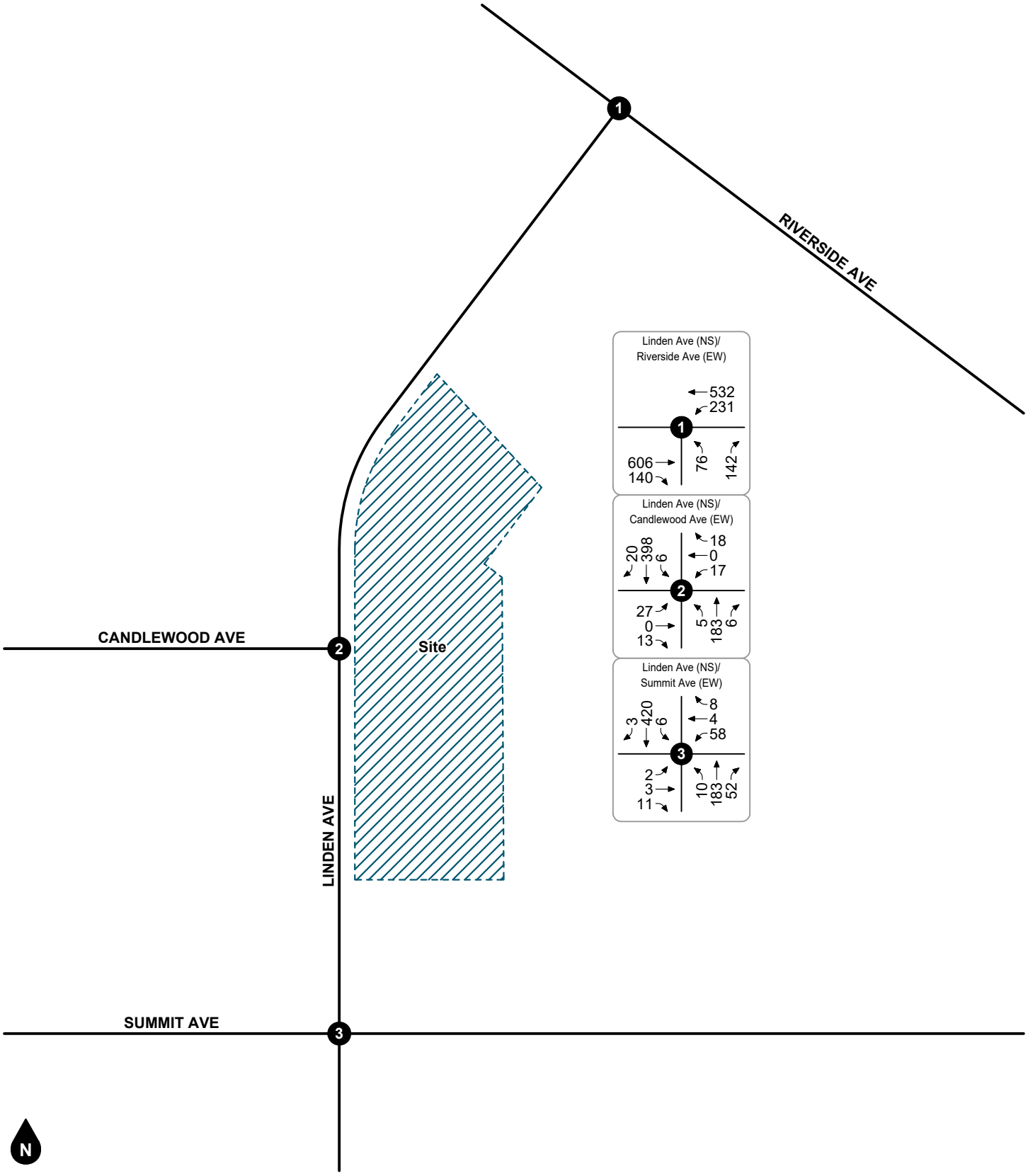


Figure 34
Opening Year (2028) With Project
AM Peak Hour Intersection Turning Movement Volumes

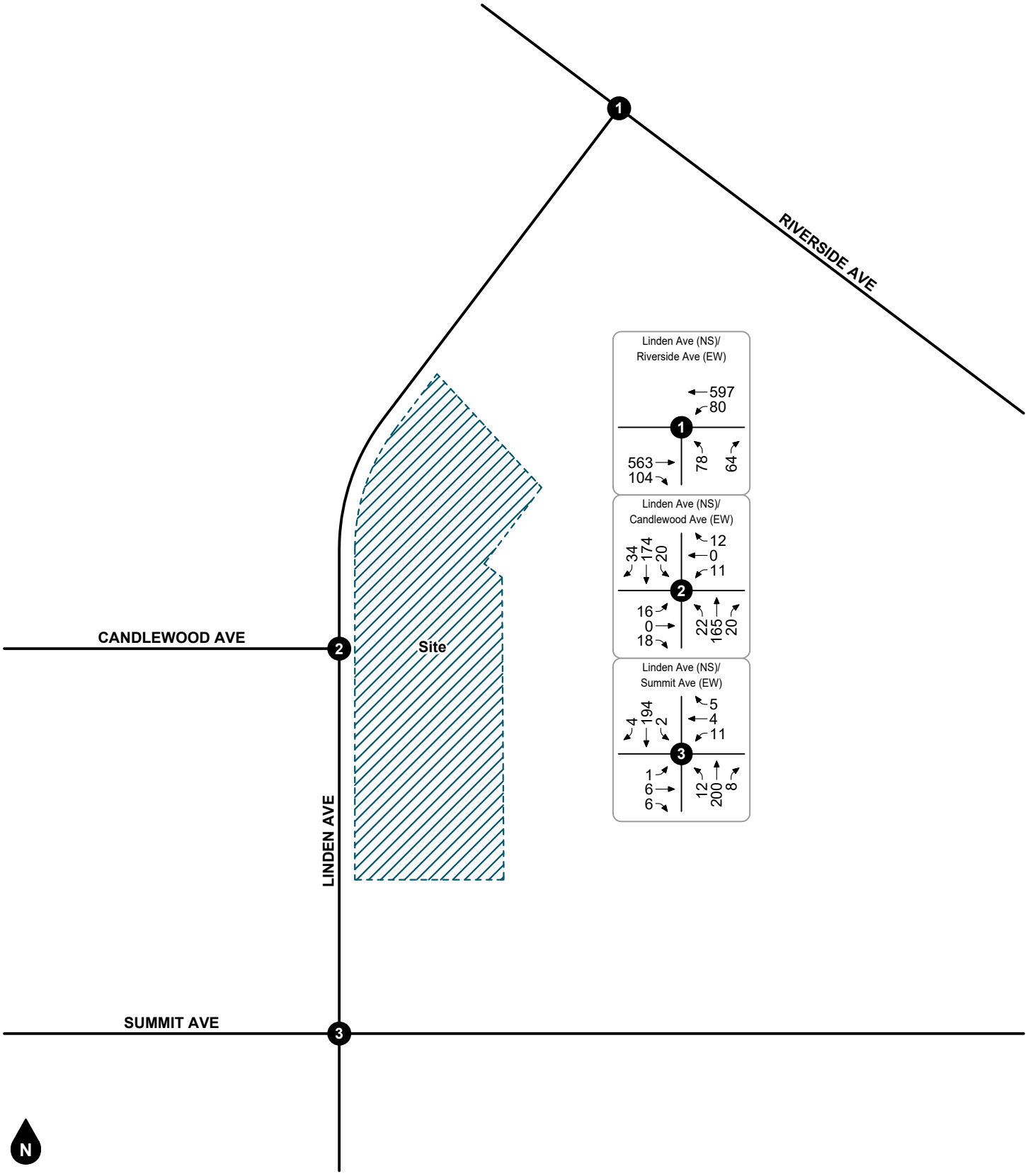
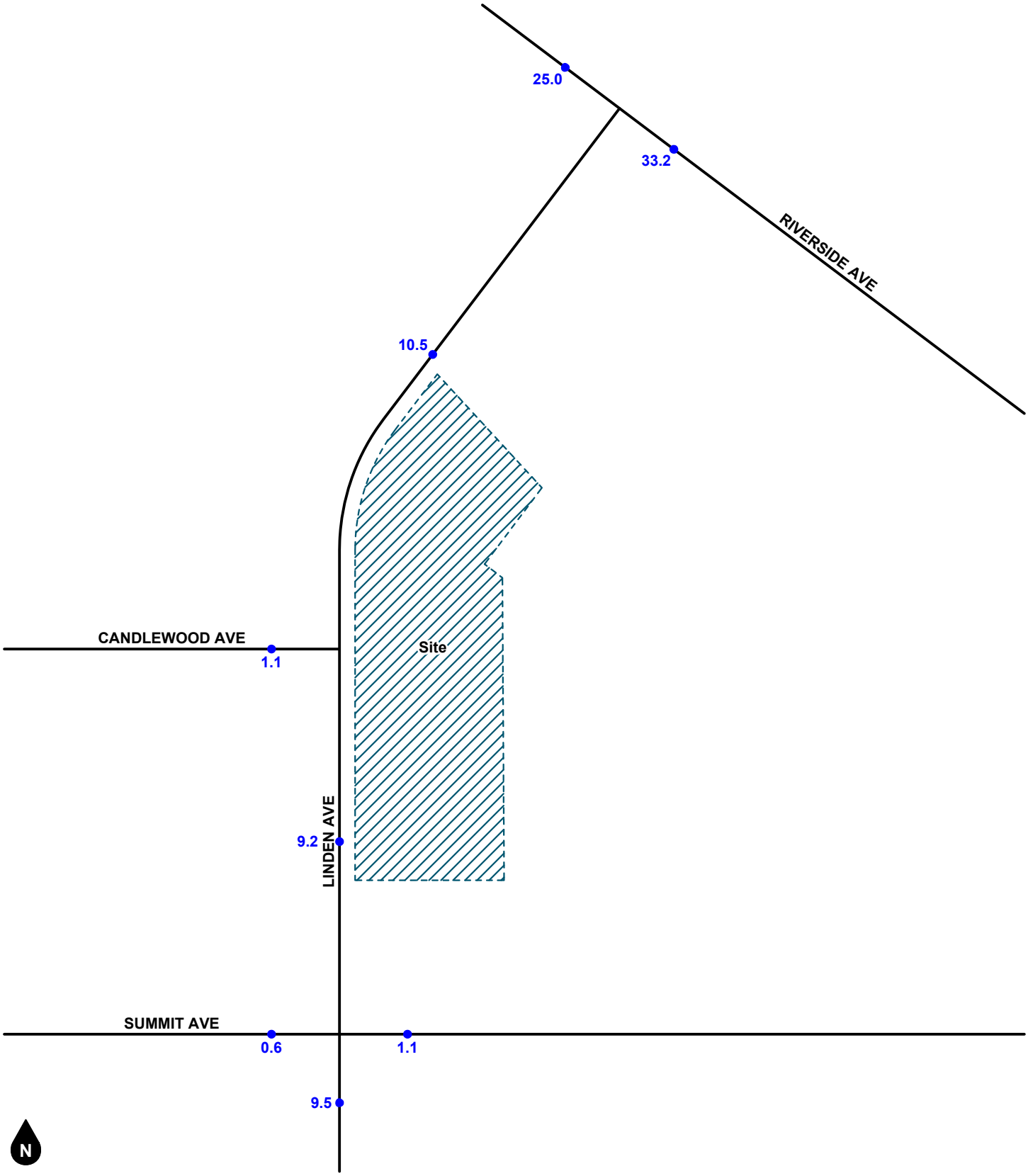


Figure 35
Opening Year (2028) With Project
PM Peak Hour Intersection Turning Movement Volumes



Legend
●## Vehicles Per Day (1,000's)

Figure 36
Year 2050 Without Project
Average Daily Traffic Volumes

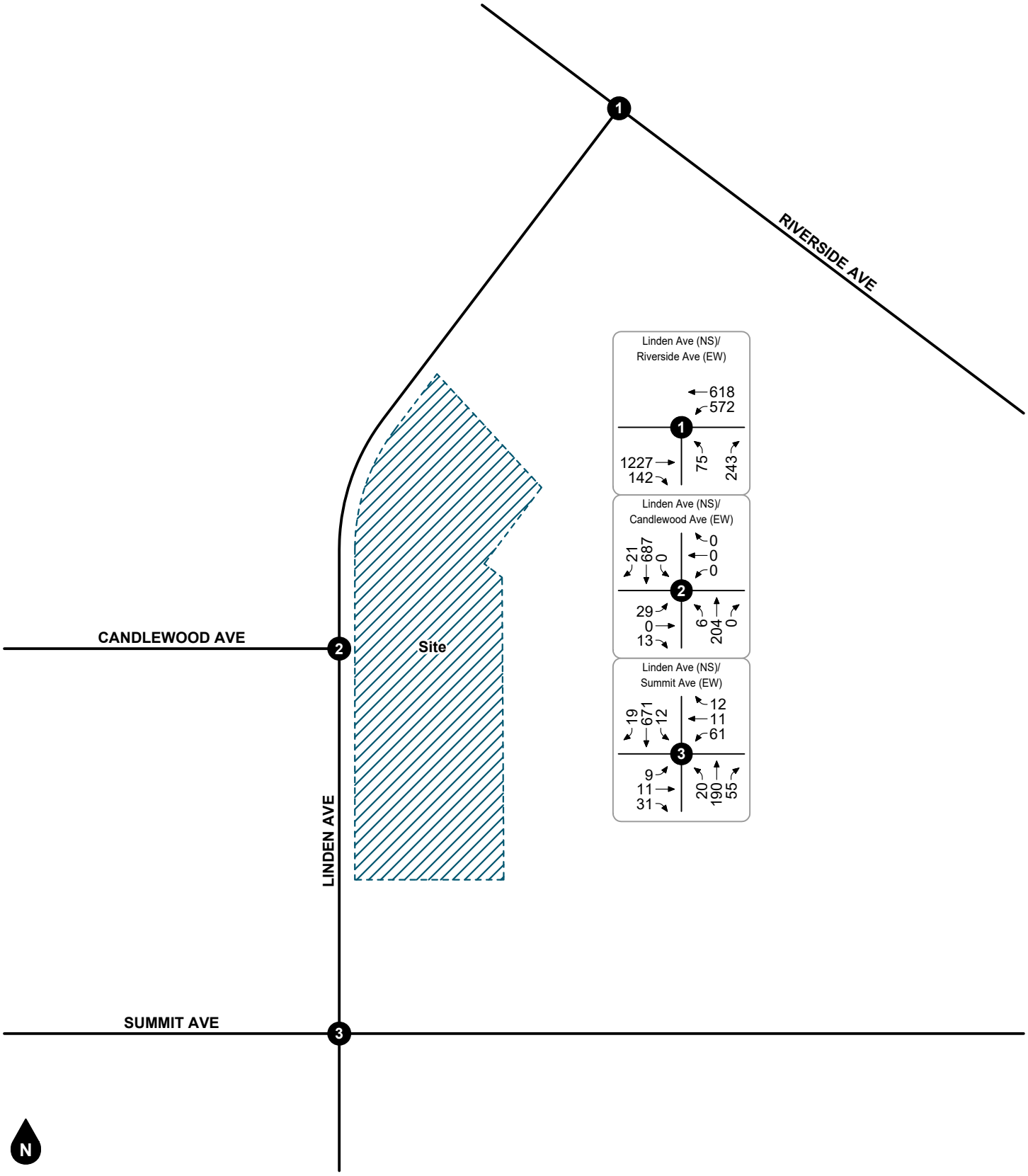


Figure 37
Year 2050 Without Project
AM Peak Hour Intersection Turning Movement Volumes

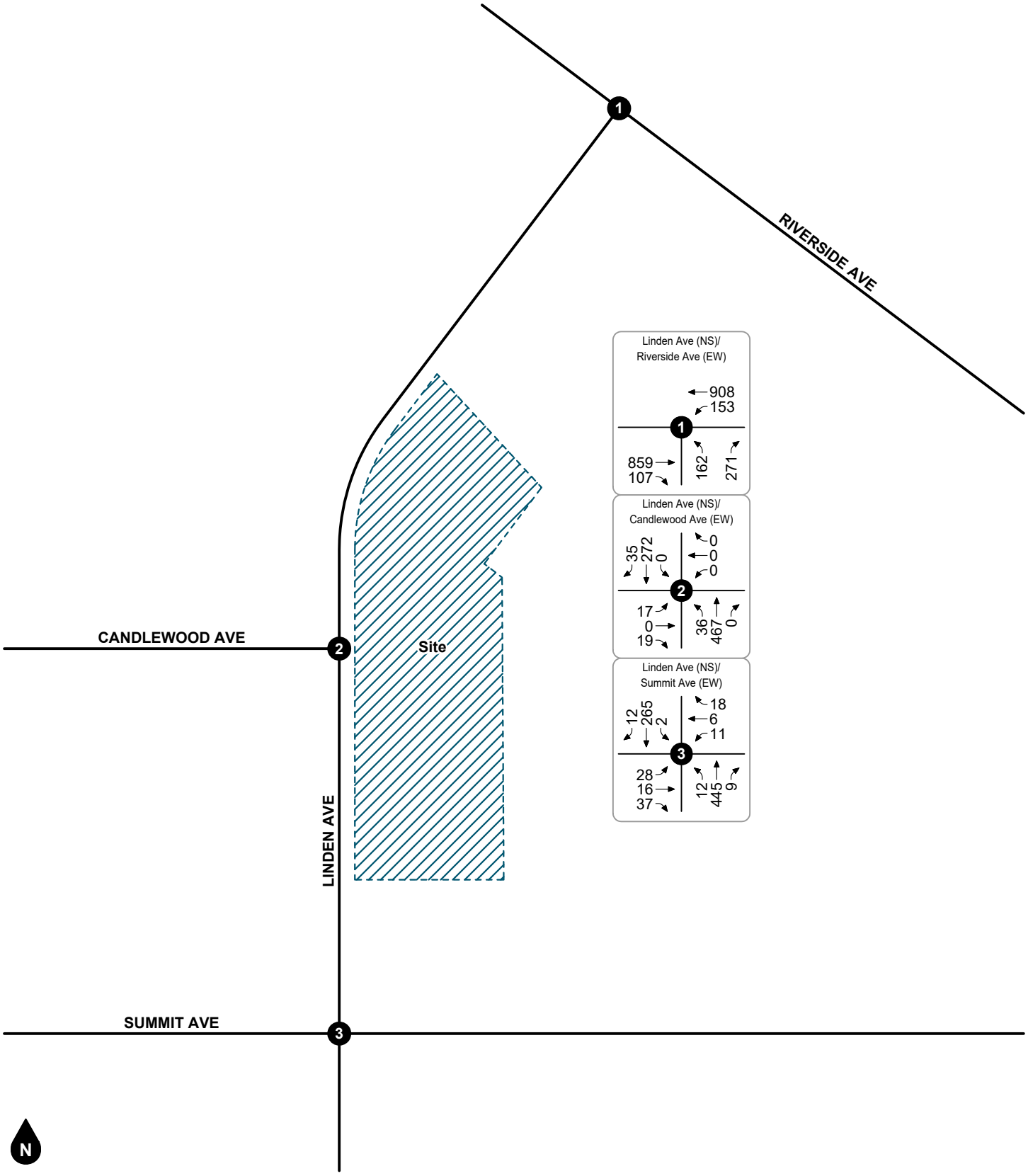
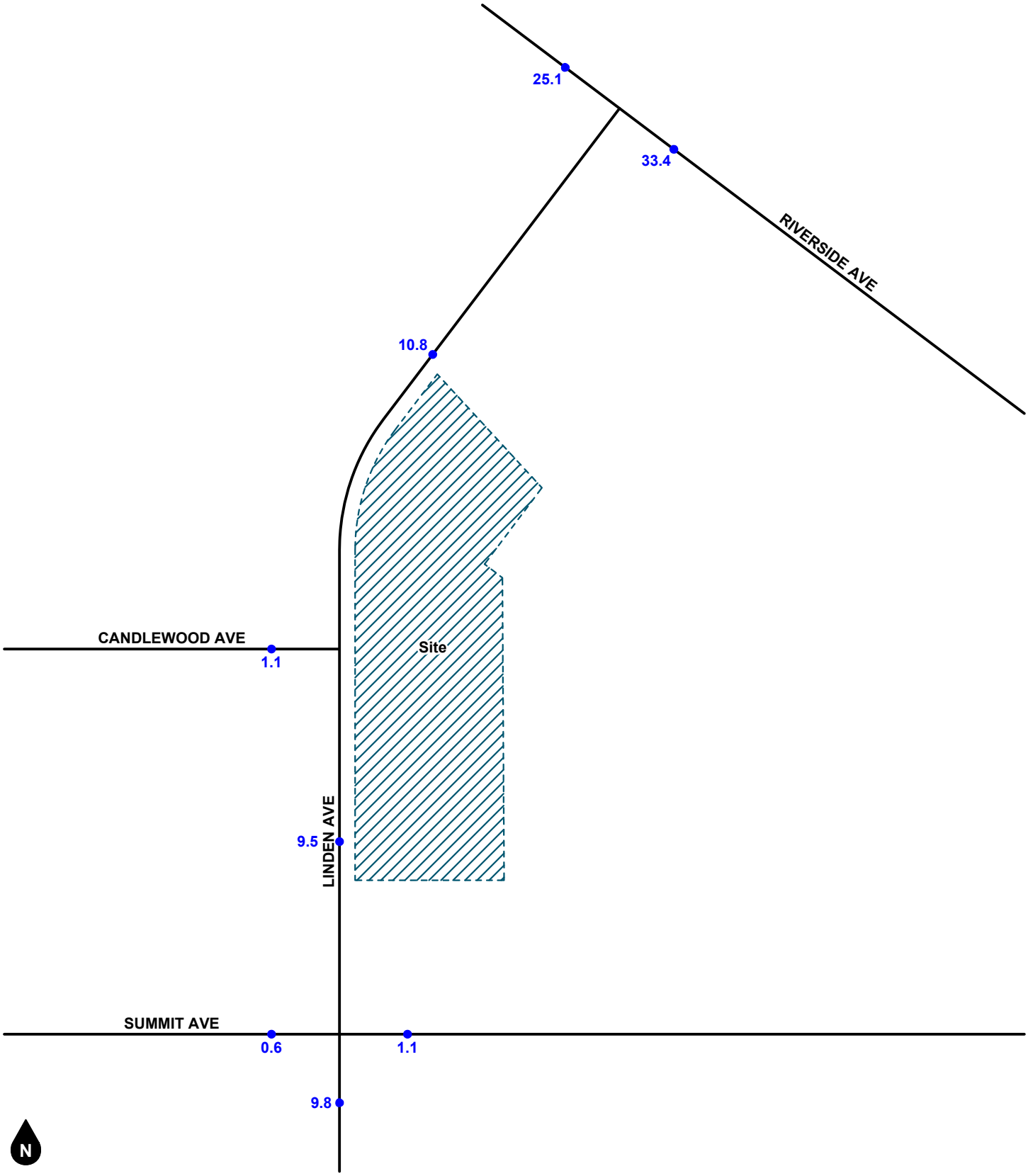


Figure 38
Year 2050 Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend
●## Vehicles Per Day (1,000's)

Figure 39
Year 2050 With Project
Average Daily Traffic Volumes

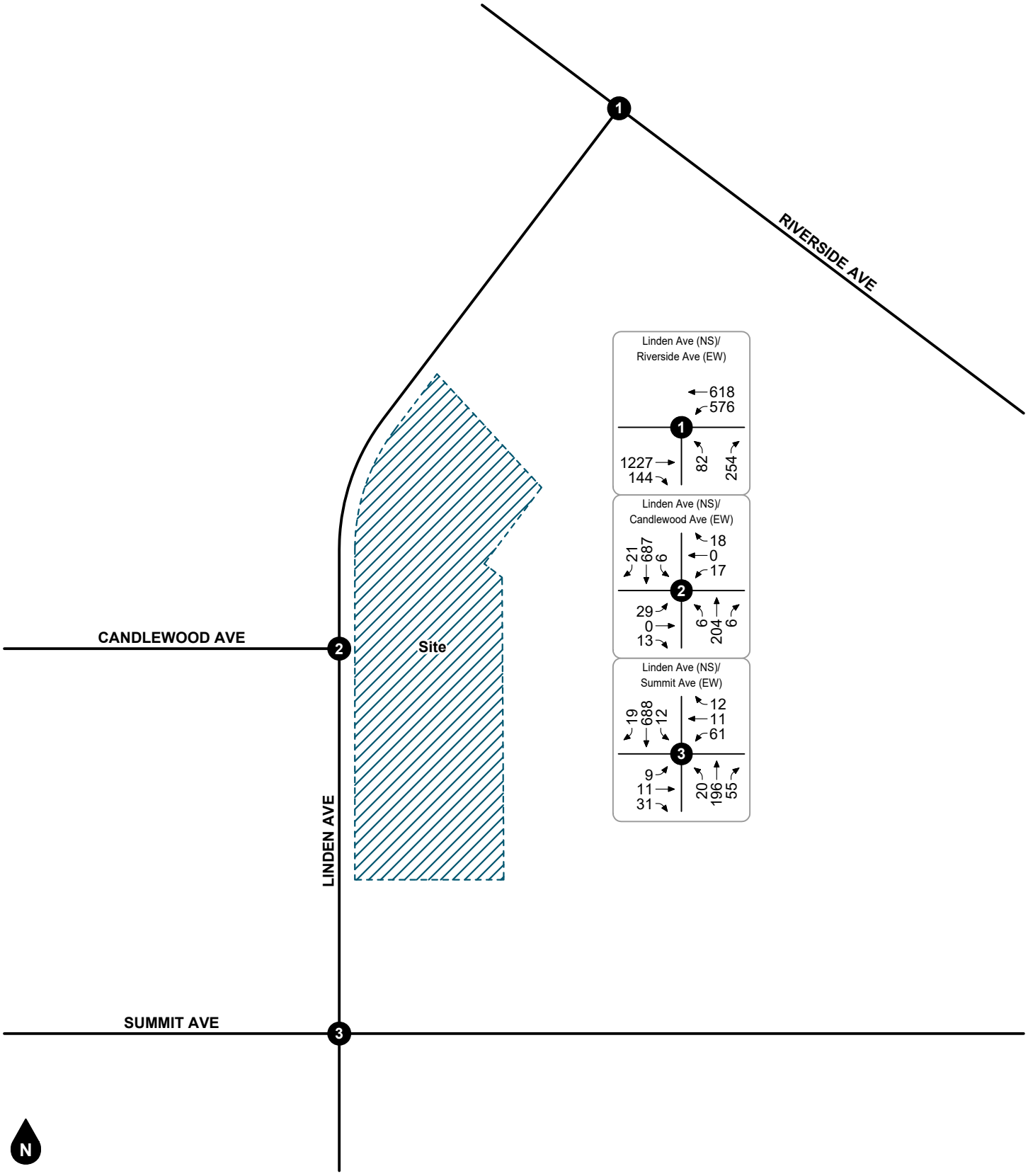


Figure 40
Year 2050 With Project
AM Peak Hour Intersection Turning Movement Volumes

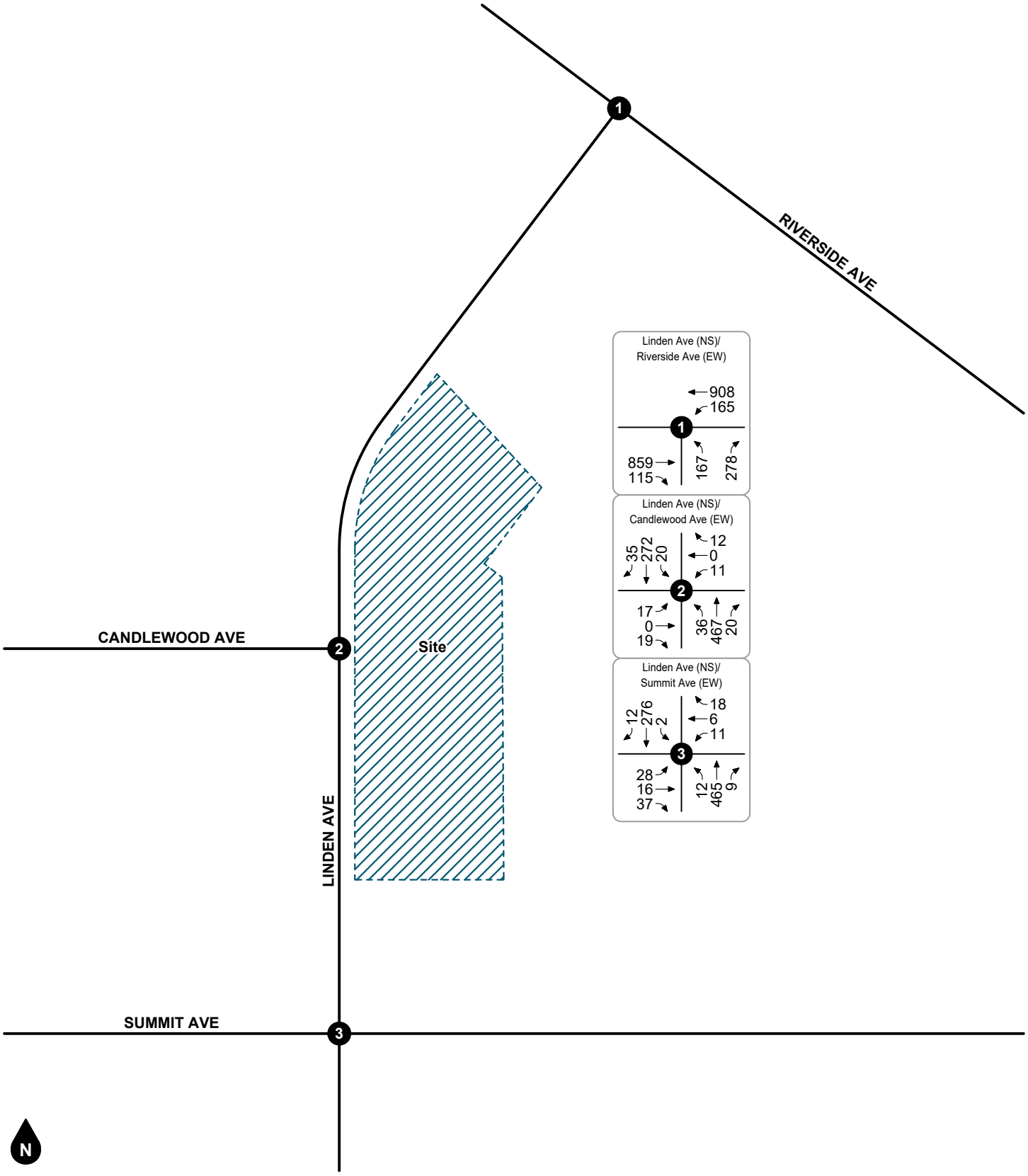


Figure 41
Year 2050 With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE LEVELS OF SERVICE ANALYSIS

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

Project design features, such as improvements necessary to provide project site access, are to be constructed by the proposed project and are described in further detail in the Site Access & Circulation section presented later in this report.

EXISTING PLUS AMBIENT GROWTH

The study intersection Levels of Service for Existing Plus Ambient Growth Without Project and Plus Project conditions are shown in Table 5. As shown in Table 5, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Ambient Growth With Project conditions; the proposed project is forecast to result in no substantial adverse effects on Level of Service operations.

OPENING YEAR (2028)

The study intersection Levels of Service for Opening Year (2028) Without and With Project conditions are shown in Table 6. As shown in Table 6, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2028) Without Project conditions and Opening Year (2028) With Project conditions; the proposed project is forecast to result in no substantial adverse effects on Level of Service operations.

YEAR 2050

The study intersection Levels of Service for Year 2050 Without and With Project conditions are shown in Table 7. As shown in Table 7, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Year 2050 Without Project and Year 2050 With Project conditions, except for the following intersection that is forecast to operate at Level of Service E during the AM peak hour:

1. Linden Avenue (NS) at Riverside Avenue (EW)

Although the Linden Avenue at Riverside Avenue [#1] intersection is forecast to continue operating at LOS E during the AM peak hour for Year 2050 With Project, the project-related traffic does not increase delay at the intersection by more than the City-established threshold of 2.0 seconds or more; therefore, the project is considered to have no substantial adverse effect at this intersection. As intersection improvements are identified to address cumulative deficiencies, the project may contribute toward improvements on a fair share basis.

To maintain an acceptable Level of Service at the study intersection the following improvements are recommended for Year 2050 conditions.

1. Linden Avenue (NS) at Riverside Avenue (EW)
   - Construct one additional westbound left turn lane.
   - Install northbound right turn overlap signal phasing.

TRAFFIC SIGNAL WARRANT ANALYSIS

The potential need for installation of a traffic signal at the unsignalized study intersections was evaluated based on the *California Manual on Uniform Traffic Control Devices* ("*California MUTCD*," November 2014), Section 4C-04, peak hour volume warrant (Warrant 3). The *California MUTCD* Section 4C-01 states "satisfaction of one or more traffic signal warrants shall not in itself require the installation of a traffic signal" as engineering judgement should be applied to the physical considerations of the location. Traffic signal warrant worksheets are provided in Appendix G.

Installation of a traffic signal is not warranted based on the peak hour volume warrant (Warrant 3) at either Linden Avenue at Candlewood Avenue or Linden Avenue at Summit Avenue intersections for any of the analysis scenarios.

STUDY ROADWAY SEGMENTS LEVEL OF SERVICE

The study roadway segment volume to capacity ratio and Levels of Service are shown in Table 8 for all analysis scenarios. As shown in Table 8, the study roadway segment is forecast to operate within acceptable Levels of Service (D or better) for Existing Plus Ambient Growth with and without Project, Opening Year (2028) with and without Project, and Year 2050 with and without Project scenarios.

Table 5
Existing Plus Ambient Growth Plus Project Intersection Levels of Service & Project-Related Effect

Study Intersection	Traffic Control[1]	Baseline Year (2028) Without Project (EAG)				Baseline Year (2028) With Project (EAGP)				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	Delay[2]	LOS[3]	Delay[2]	LOS	Change	Substantial Effect?	Change	Substantial Effect?
1. Linden Avenue at Riverside Avenue	TS	17.5	B	11.3	B	18.1	B	11.9	B	+0.6	NO	+0.6	NO
2. Linden Avenue at Candlewood Avenue	CSS	16.6	C	12.3	B	17.6	C	13.3	B	+1.0	NO	+1.0	NO
3. Linden Avenue at Summit Avenue	CSS	18.1	C	12.1	B	18.7	C	12.4	B	+0.6	NO	+0.3	NO

Notes:

1. TS = Traffic Signal; CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or 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
4. The unsignalized intersection that is forecast to operate at an unacceptable level of service (LOS) without the project. Current other development construction adjacent to the project is conditioned to provide a traffic signal at this location.
5. The project does not add 5.0 seconds or more to an intersection that is forecast to operate at LOS D without the project.

Table 6
Opening Year (2028) Intersection Levels of Service & Project-Related Effect

Study Intersection	Traffic Control[1]	Opening Year (2028) Without Project				Opening Year (2028) With Project				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]	Change	Substantial Effect?	Change	Substantial Effect?
1. Linden Avenue at Riverside Avenue	TS	17.6	B	11.4	B	18.1	B	12.0	B	+0.5	NO	+0.6	NO
2. Linden Avenue at Candlewood Avenue	CSS	16.7	C	12.4	B	17.7	C	13.4	B	+1.0	NO	+1.0	NO
3. Linden Avenue at Summit Avenue	CSS	18.2	C	12.2	B	18.8	C	12.5	B	+0.6	NO	+0.3	NO

Notes:

1. TS = Traffic Signal; CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or 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 7
Build-out Year (2050) Intersection Levels of Service & Project-Related Effect

Study Intersection	Traffic Control[1]	Build-out Year (2050) Without Project				Build-out Year (2050) With Project				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]	Change	Substantial Effect?	Change	Substantial Effect?
1. Linden Avenue at Riverside Avenue	TS	67.5	E	21.2	C	68.2	E	21.9	C	+0.7	NO	+0.7	NO
With Improvements	TS	34.4	C	20.1	C	35.4	D	20.6	C	+1.0	NO	+0.5	NO
2. Linden Avenue at Candlewood Avenue	CSS	23.0	C	19.7	C	24.4	C	22.0	C	+1.4	NO	+2.3	NO
3. Linden Avenue at Summit Avenue	CSS	25.2	D	17.8	C	26.0	D	18.4	C	+0.8	NO	+0.6	NO

Notes:

1. TS = Traffic Signal; CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or 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
3. LOS = Level of Service

Table 8
Future Scenarios Roadway Segment Levels of Service

ID	Roadway	Segment		Roadway Capacity[1]			Baseline Year (2028) Without Project			Baseline Year (2028) With Project		
				Ultimate	Existing/Proposed							
		From	To	Classification	Lanes	Capacity	ADT[3]	V/C[3]	LOS[3]	ADT[3]	V/C[3]	LOS[3]
1.	Linden Avenue	Riverside Avenue	Summit Avenue	Secondary Highway	2	18,000	4,800	0.27	A	5,200	0.29	A

ID	Roadway	Segment		Roadway Capacity[1]			Opening Year (2028) Without Project			Opening Year (2028) With Project		
				Ultimate	Existing/Proposed							
		From	To	Classification	Lanes	Capacity	ADT[2]	V/C[2]	LOS[2]	ADT[2]	V/C[2]	LOS[2]
1.	Linden Avenue	Riverside Avenue	Summit Avenue	Secondary Highway	2	18,000	4,890	0.27	A	5,210	0.29	A

ID	Roadway	Segment		Roadway Capacity[1]			Year 2050 Without Project			Year 2050 With Project		
				Ultimate	Existing/Proposed							
		From	To	Classification	Lanes	Capacity	ADT[3]	V/C[3]	LOS[3]	ADT[3]	V/C[3]	LOS[3]
1.	Linden Avenue	Riverside Avenue	Summit Avenue	Secondary Highway	2	18,000	10,510	0.58	A	10,830	0.60	A

Notes:

1. Roadway classifications from the Rialto General Plan Circultation Element, and the cooresponding roadway capacity from the City of Rialto Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service (LOS) Assessment (Updated
2. ADT = Average Daily Traffic; V/C = Volume to Capacity Ratio; LOS = Level of Service.

7. SITE ACCESS & ON-SITE CIRCULATION

This section evaluates the project site access and on-site circulation. Vehicular access for the project site is proposed via two driveways. Vehicle access for the project site is proposed via a gated entry at the intersection of Linden Avenue and Candlewood Avenue. Two emergency vehicle access (EVA) driveways are provided for emergency vehicles only.

PROJECT DESIGN FEATURES

This analysis assumes the project will construct the following improvements to provide project site access:

Roadway Segments

Linden Avenue

- Construct the ultimate half-section width (Secondary Road with 88 feet ROW and 64 feet roadway), including landscaping and parkway improvements along project boundary abutting Road in conjunction with the development.

Intersections

2. Linden Avenue (NS) at Candlewood Avenue/Project Driveway (EW)
   - Construct the project driveway with one inbound lane and one outbound lane.
   - Install outbound stop control for westbound site egress.

This analysis also assumes the project shall comply with the following conditions as part of the City of Rialto standard development review process to ensure adequate geometric design and emergency access:

- 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 Rialto.

- All on-site and off-site roadway design, signing/striping, and traffic control improvements relating to the proposed project shall be submitted to the City for review and constructed following applicable State/Federal engineering standards to the satisfaction of the City of Rialto.

- The final grading, landscaping, and street improvement plans shall demonstrate that applicable sight distance requirements are met.

- The project shall comply with the City of Rialto municipal parking requirements which will be reviewed as a part of the standard development review process.

- Final project plans shall demonstrate adequate emergency vehicle access and circulation to the satisfaction of the City of Rialto Public Works and Fire Departments.

- A construction worksite traffic control plan shall comply with applicable engineering standards outlined in the California *Manual of Uniform Traffic Control Devices* and shall be submitted to the City for review and approval before 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.

SITE ACCESS QUEUING ANALYSIS

Table 9 summarizes the results of the queue analysis to check for potential conflicts between the project driveway and the adjacent key intersections. The forecasted queue lengths shown in Table 9, are based on the HCM 95th-percentile back-of-queue methodology. Queuing calculations for the project driveways and the adjacent intersection are shown in the Level of Service worksheets provided in Appendix D.

As illustrated in Table 9, vehicle queue lengths at for project driveways are forecast to operate within the available storage lengths during the peak hours for the Opening Year (2028) With Project conditions.

GATE STACKING ANALYSIS

Vehicle stacking at the proposed gated access points was evaluated to ensure adequate on-site vehicle storage length allows vehicles a space to wait for the gate to open without blocking the public right-of-way. The vehicle stacking area is measured from the gate to the edge of sidewalk.

The gate queueing analysis was performed based on procedures outlined in the ITE *Transportation and Land Development* (1988). The methodology estimates the number of queueing vehicles at the service point based on a Poisson distribution algorithm for estimating the effect of surges and random arrivals. Analysis inputs include the number of inbound vehicles, the number of gated access locations, the number of service lanes per access, service rate capacity of the gate, and the confidence interval used for the analysis. The length of necessary stacking space is then based on the design vehicle length multiplied by the expected number of vehicles per service lane.

Table 10 summarizes the project driveway gate access analysis; a gate stacking worksheet is provided in Appendix F. A card operated gate design service rate is 8.9 seconds per vehicle with a design volume of 340 vehicles per hour to enter the gate. The gate entry is computed as a single entry with no residential by-pass lane, located right of the visitor keypad entry which will allow for residents to enter unimpeded by visitors delayed at the key-pad entry. The driveway gate entrance provides approximately 50 feet of storage length. As shown in Table 10, based on the inbound volume and service rate, the gate will have sufficient storage to accommodate the forecast queue length of 25 feet (approximately one car).

Table 9
Site Access Queuing Analysis

Study Intersection	Approach	Lane	Storage Length (Feet)[2]	Peak Hour 95th-Percentile Queue Length (Feet)[1] Year (2040) With Project AM	Peak Hour 95th-Percentile Queue Length (Feet)[1] Year (2040) With Project PM	Adequate Storage Provided
2. Linden Avenue at Candlewood Avenue	Northbound	Shared	240	<20	<20	YES
	Southbound	Shared	500	<20	<20	YES
	Eastbound	Shared	40	<20	<20	YES
	Westbound	Shared	90	30	<20	YES

Notes:

1. The forecast 95th-percentile queue lengths shown in the delay calculation worksheets have been rounded up to nearest 5-fo
2. Length of turning lane storage or distance to the adjacent driveway.

Table 10
Gate Stacking Minimum Queue Requirements

Gate / Peak Hour	Peak Hour	Demand Flow (veh/hr)[1]	Service Lanes	Service Rate Capacity (veh/hr/ln)[2]	Utilization Factor	Queue Length (feet)[3]	Storage Length (feet)	Adequate Storage Provided
2. Linden Avenue at Candlewood Avenue	AM Peak Hour	12	1	340	0.04	25	55	YES
	PM Peak Hour	40			0.12	25		YES

Notes:

1. AM and PM peak hour inbound demand is shown.
2. Service rate capacities from *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972). For a conservative estimate, the card code or RFI code design rate of 340 vehicles per hour for cars was reduced to 110 vehicles per hour for trucks.
3. Based on Transportation and Land Development (Institute of Transportation Engineers, 1988) 'Applications of Queuing Analysis' methodology; see Appendix F.

8. IMPROVEMENTS & FAIR SHARE ANALYSIS

This section summarizes the recommended improvements identified in the previous sections of this report and the project's fair share toward any improvements required for cumulative conditions.

Project design features (as detailed in the Site Access & On-Site Circulation Section 7) involve improvements necessary to provide project site, and the construction along the project site frontage.

OFF-SITE IMPROVEMENTS

To maintain an acceptable Level of Service at the study intersection, the following improvements are recommended for Year 2050 conditions:

1. Linden Avenue (NS) at Riverside Avenue (EW)
    - Construct one additional westbound left turn lane.
    - Install northbound right turn overlap signal phasing.

Although the Linden Avenue at Riverside Avenue [#1] intersection is forecast to continue operating at LOS E during the AM peak hour for Year 2050 With Project, the project-related traffic does not increase delay at the intersection by more than the City-established threshold of 2.0 seconds or more; therefore, the project is considered to have no substantial adverse effect at this intersection. As intersection improvements are identified to address cumulative deficiencies, the project may contribute toward improvements on a fair share basis.

DEVELOPMENT IMPACT FEE

The proposed project shall contribute towards the City of Rialto Development Impact Fee program. The Development Impact Fee provides a funding mechanism for arterial streets, traffic signals, interchange improvements as well as emergency services. The purpose of such fees is to minimize, to the greatest extent practicable, the impact that new development has on the City's public services and public facilities. The City intends for new development project applicants to pay their fair share of the costs of providing such public services and public facilities. Unless otherwise approved by the City, all development projects are required to pay the Development Impact Fee as a condition of development.

FAIR SHARE ANALYSIS

A fair share analysis was prepared to identify the share of project trips contributed to substantially impacted locations for which improvements are identified that may not be currently included in the City's Development Impact Fee program. To the extent that any of the identified improvements are not included in the City's Development Impact Fee program, the project should contribute towards those improvements on a fair share basis. The project fair share is based on the proportion of project peak hour trips contributed to the improvement location relative to the total new peak hour traffic volume.

The fair share analysis is shown in Table 11. Cost estimates are sensitive to the quantity and location of work specified for a given installation. These values represent the relative magnitude of the cost and should be verified through the bidding process.

Table 11
Fair Share Analysis

ID	Study Intersection	Estimated Construction Cost[1]	Peak Hour	Peak Hour Volume					Project % at Intersection[2]	Project Fair Share Cost
				Existing	Horizon Year (2050) With Project	Project Trips	New Trips	Project % of New Trips		
1.	Linden Avenue at Riverside Avenue	$193,964	AM	1,626	2,901	24	1,275	1.9%	2.8%	$5,512
			PM	1,366	2,492	32	1,126	2.8%		

Notes:

1. Cost estimate based on values from the San Bernardino County Transportation Authority Preliminary Construction Cost Estimates For Congestion Management Program (2003) and has been faCtored by 2.59 based on the California Construction Cost Index between January 2003 and August 2025. Costs estimates are sensitive to the quantity and location of work specified for a given installation. These values represent the relative magnitude of the cost and should be verified through the bidding process.
2. Project share is based on the greater of the AM or PM percent contribution of project trips to new trips.

9. VEHICLES MILES TRAVELED (VMT) ASSESSMENT

This section provides an overview of the VMT background, requirements, and summarizes the proposed project, VMT project assessment.

BACKGROUND

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

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

VMT SCREENING CRITERIA

The VMT screening assessment has been prepared in accordance with City TIA Guidelines, which were developed based on guidance from OPR Technical Advisory. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. The OPR Technical Advisory provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

The City TIA Guidelines identify screening criteria for certain types of projects that typically reduce VMT and may be presumed to result in a less than significant VMT impact. To qualify for VMT screening, the project need only satisfy one of the following screening criteria:

- Projects located within a Transit Priority Area (TPA)
  - Projects located within one-half mile radius of a major transit stop or high-quality transit corridor
- Projects located within a low VMT area
  - Site location can be verified with the web-based VMT Screening Tool[9]
- Project Type Screening
  - Local serving land use
  - Projects which generate less than net new 110 daily vehicle trips (ADT)

[9] The SBCTA VMT Screening Tool was developed from the San Bernardino Transportation Analysis Model (SBTAM) travel forecasting model to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs).

TPA Screening

Projects located within a TPA, defined as within one-half mile of a major transit stop or high-quality transit corridor, may be presumed to result in a less than significant VMT impact absent substantial evidence to the contrary. The City TIA Guidelines note that this screening criteria may not apply if the project has a floor area ratio (FAR) less than 0.75, the project is inconsistent with applicable Sustainable Communities Strategy, or the project constructs a smaller number of moderate or high-income residential units than the existing number of affordable residential units.

Based on a review of the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool, the proposed project is not located within a TPA; therefore, this screening criteria is not met.

Low VMT Area Screening

As prescribed in the City TIA Guidelines, the SBCTA VMT Screening Tool was used to assess low VMT area screening for the project. The VMT Screening Tool was developed using the County travel forecasting model to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs) within the County transportation region. TAZs are geographic polygons similar to census block groups used to represent areas of homogenous travel behavior. Total daily VMT per service population was estimated for each TAZ. This presumption may not be appropriate if the project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

Based on the VMT Screening Tool results for the project site, located within 53750302, the baseline year (2025) VMT per service population for the project TAZ is 25.0, which is less than the City-established threshold of 32.7 VMT per service population based on the San Bernardino County regional average baseline. Therefore, the proposed project satisfies the City-established screening criteria for projects located in a low VMT area and the project's VMT impact would be less than significant. Appendix B contains the project VMT Scoping Agreement and the SBCTA VMT Screening Tool results for the project site.

Project Type Screening

The City TIA Guidelines identify the several types of projects that may be presumed to have a less than significant VMT impact as they are local serving and thus can be expected to reduce VMT or they are small enough to have a negligible impact:

- Projects consisting of local servicing land use
  - Local-serving retail less than 50,000 square feet
  - Local-serving K-12 schools
  - Local parks
  - Day care centers
  - Local gas stations
  - Local banks
  - Local-serving hotels (e.g. non-destination hotels)
  - Local-serving medical
  - Student housing projects on or adjacent to college campuses
  - Local-serving assembly uses (places of worship, community organizations)
  - Community institutions (Public libraries, fire stations, local government)
  - Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
  - Affordable or supportive housing
  - Assisted living facilities

- Trip Screening
  - Projects generating with less than 110 daily passenger vehicle trips (ADT)
    - 11 single-family residential dwelling units
    - 16 multi-family residential dwelling units
    - 10,000 square feet of office
    - 15,000 square feet of light industrial
    - 63,000 square feet of warehousing
    - 79,000 square feet of high-cube transload and short-term storage warehouse

The project consists of 67 single-family dwelling units which generates more than 110 net new daily trips. Therefore, the proposed project does not satisfy the City-established screening criteria for land use types.

PROJECT ASSESSMENT

The proposed project satisfies the City-established vehicle miles traveled (VMT) screening criteria for projects located in a Low VMT area, and the project may be presumed to result in a less than significant VMT impact; further VMT analysis or mitigation is not required.

10. CONCLUSIONS

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in previous sections of this study. Figure 42 summarizes the recommended improvements.

PROJECT TRIP GENERATION

The proposed project is forecast to generate a total of approximately 632 daily trips, including 47 trips during the AM peak hour and 63 trips during the PM peak hour.

LEVEL OF SERVICE ANALYSIS

The study intersections currently operate and are forecast to continue operating within acceptable Levels of Service (D or better) during the peak hours for the Existing, Existing Plus Ambient Growth, Existing Plus Ambient Growth Plus Project, Opening Year (2028) Without Project and Opening Year (2028) With Project analysis scenario conditions.

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for the Year 2050 with and without Project scenario conditions, except for the following intersection that is forecast to operate at Level of Service E during the AM peak hour:

1. Linden Avenue (NS) at Riverside Avenue (EW)

SUMMARY OF IMPROVEMENTS

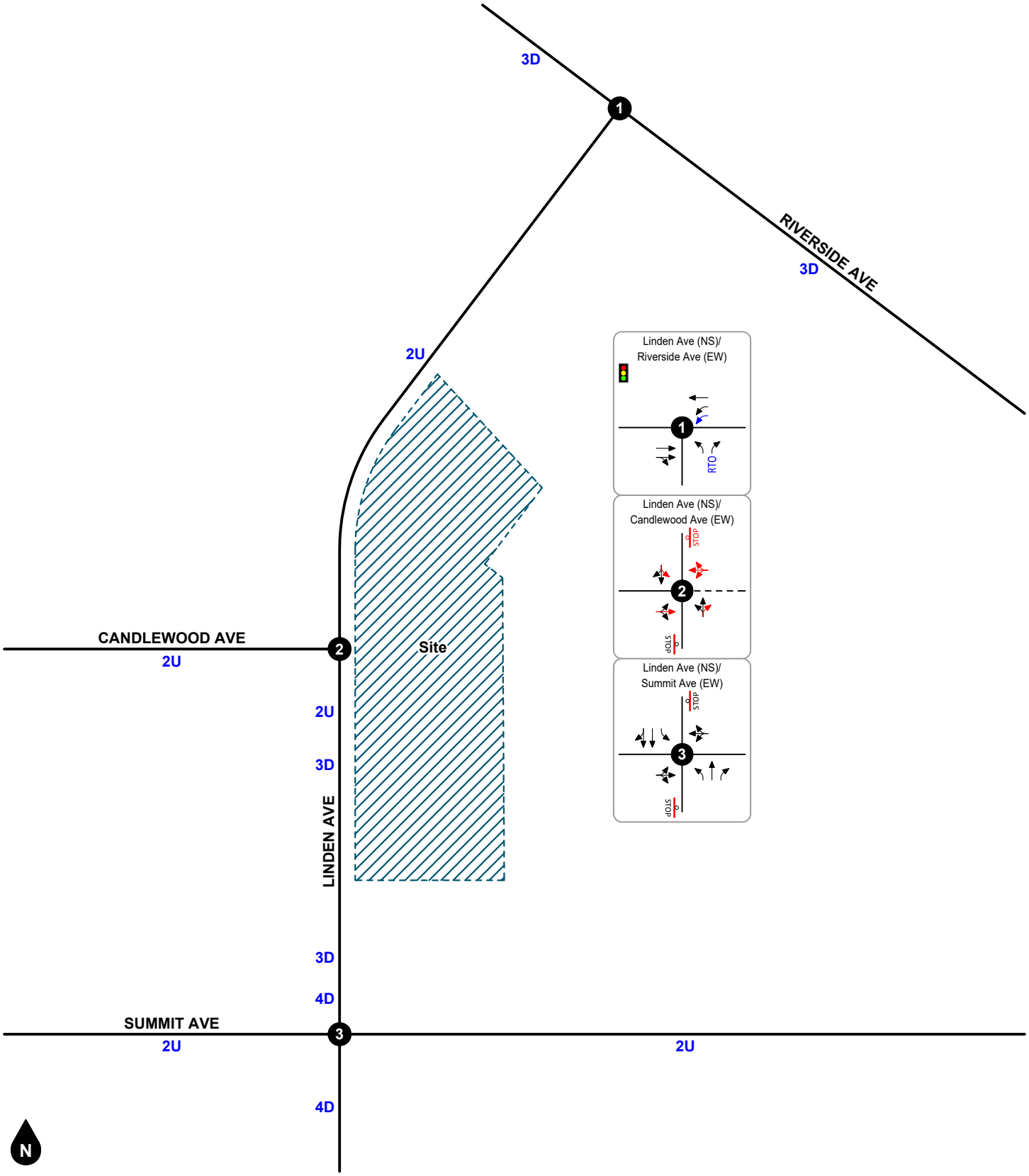
Although the Linden Avenue at Riverside Avenue [#1] intersection is forecast to continue operating at LOS E during the AM peak hour for Year 2050 With Project, the project-related traffic does not increase delay at the intersection by more than the City-established threshold of 2.0 seconds or more; therefore, the project is considered to have no substantial adverse effect at this intersection. As intersection improvements are identified to address cumulative deficiencies, the project may contribute toward improvements on a fair share basis.

To maintain an acceptable Level of Service at the study intersection the following improvements are recommended for Year 2050 conditions.

1. Linden Avenue (NS) at Riverside Avenue (EW)
    - Construct one additional westbound left turn lane.
    - Install northbound right turn overlap signal phasing.

VEHICLE MILES TRAVELED

The proposed project satisfies the City-established vehicle miles traveled (VMT) screening criteria for projects located in a Low VMT area, and the project may be presumed to result in a less than significant VMT impact; further VMT analysis or mitigation is not required.



Legend

- Traffic Signal
- Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane
- Recommendations
- Future Improvement By Others
- Project Driveway
- RTO Right Turn Overlap

Figure 42
Recommended Lane Geometry and Intersection Traffic Controls

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Traffic Count Data
Appendix D Intersection Level of Service Worksheets
Appendix E Post Processing Worksheets
Appendix F Gate Stacking Analysis
Appendix G Traffic Signal Warrant 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
SF	Square Foot
SP	Service Population
TSF	Thousand Square Feet
V/C	Volume to Capacity Ratio
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 is 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. Also known as a signal cycle.

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). Also known as gap.

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.

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.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors. Also known as a demand responsive signal.

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.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheelbase as well as the steering mechanism of the vehicle.

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

Exhibit A

SCOPING AGREEMENT FOR TRAFFIC IMPACT ANALYSIS

This following form shall be used to acknowledge preliminary approval of the scope for the traffic impact analysis (TIA) of the following project. The TIA must follow the City of Rialto Traffic Impact Analysis – Report Guidelines and Requirements, adopted by the City Council on _____.

City of Rialto

Traffic Impact Analysis

Scoping Agreement

Case No. MC20 -25-0013 PPD20 -

Related Cases -

SP No. _____

EIR No. _____

GPA No. _____

ZC No. _____

Project Name: TTM20793

Project Address: Eastside of Linden Avenue approximately 300 feet north of Summit Avenue.

Project Description: 67 single family residential dwelling units.

	Consultant	Developer
Name:	Ganddini Group, Inc./ Perrie Ilercil	Lytle Development Company
Address:	555 Parkcenter Drive Suite 225 Santa Ana CA	2050 Main Street, Suite 250 Irvine, CA
Telephone:	714-795-3100 ext 103	
Fax:	perrie@ganddini.com	

1. Trip Generation Source: ITE Trip Generation Manual (11th Edition, 2021)

Existing GP Land Use vacant Proposed Land Use Single Family Resd

Current Zoning: Single Family Resd (R-1D) Proposed Zoning: Single Family Resd

Total Daily Project Trips: 632

	Current Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				12	24	47
PM Trips				40	23	63

Internal Trip Allowance Yes ✔ No (_____ % Trip Discount)

Pass-By Trip Allowance Yes ✔ No (_____ % Trip Discount)

For appropriate land uses, a pass-by trip discount may be allowed not to exceed 25%. Discount trips shall be indicated on a report figure for intersections and access locations.

2. Trip Geographic Distribution: N 0 % S 50 % E 30 % W 20 %

(Detailed exhibits of trip distribution must be attached with Trucks as a separate exhibit)

3. Background Growth Traffic

Project Completion Year: 2028 Annual Background Growth Rate: 2 %

Other Phase Years NA

Other area projects to be considered: TBD

(Contact Planning for Lists. Correlate projects to exhibit map and also indicate which projects have been included in study area forecasts for existing + background growth + project + cumulative)

Model/Forecast methodology: Opening Year - ambient growth; Buildout - SBTAM model

4. Study Intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies received.)

1. Linden Avenue and Riverside Avenue
2. Linden Avenue and Candlewood Avenue
3. Linden Avenue and Summit Avenue
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

5. Study Roadway Segments: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies received.)

1. Linden Avenue - Riverside to Summit
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

6. Other Jurisdictional Impacts

Is this project within any other Agency's Sphere of Influence or within one-mile of another jurisdictional boundary?

YES ✔
NO

If so, name of Jurisdiction: County of San Bernardino

7. Site Plan (please attach 11" x 17" legible copy)

8. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (to be filled out by the City of Rialto Public Works Department) (NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing un-signalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

Traffic Signal Warrants for Linden Avenue at Candlewood Avenue and Linden Avenue at Summit Avenue.

9. Existing Conditions

Traffic count data must be new or within one year. Provide traffic count dates if using other than new counts.

Date of counts: NA

10. Active Transportation and Public Transportation

Identify available Active Transportation and Public Transportation currently serving the site.

Sidewalks are currently provided on the west side of Linden Avenue

Does the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities?

Yes _____ No ✔

NOTE Fees are due and must be submitted with, or prior to submittal of this form. The City will not process the Scoping Agreement prior to the receipt of the processing fee.

Fees Paid: _____ Date _____

Scoping Agreement Submittal date June 19, 2025

Scoping Agreement Resubmittal date July 28, 2025

Perrie Ilercil, Ganddini Group June 18, 2025

Applicant/Engineer Date

Land Use Concurrence:

_____

Development Services Department Date

Approved by:

Michael Lloyd 7/29/2025

Public Works Department Date

NOTE:

The Applicant/Engineer acknowledges that the Scoping Agreement is intended to assist in the preparation of any required TIA. It is preliminary in nature and the City does not have sufficient data to determine the ultimate conditions that may be imposed for the project. It does not provide nor limit the requirements imposed on the Project but is intended only to provide initial input into the parameters for review of the traffic generated by the Project and the initial areas to be considered and studied. Subsequent changes to scope of required analysis to be included in the TIA may be required by the Transportation Commission, Planning Commission, and/or the City Council upon Public Works Director/City Engineer review and approval.

FOR CITY STAFF USE ONLY:

TIA NEEDED: X YES ___NO

INITIALS MDL

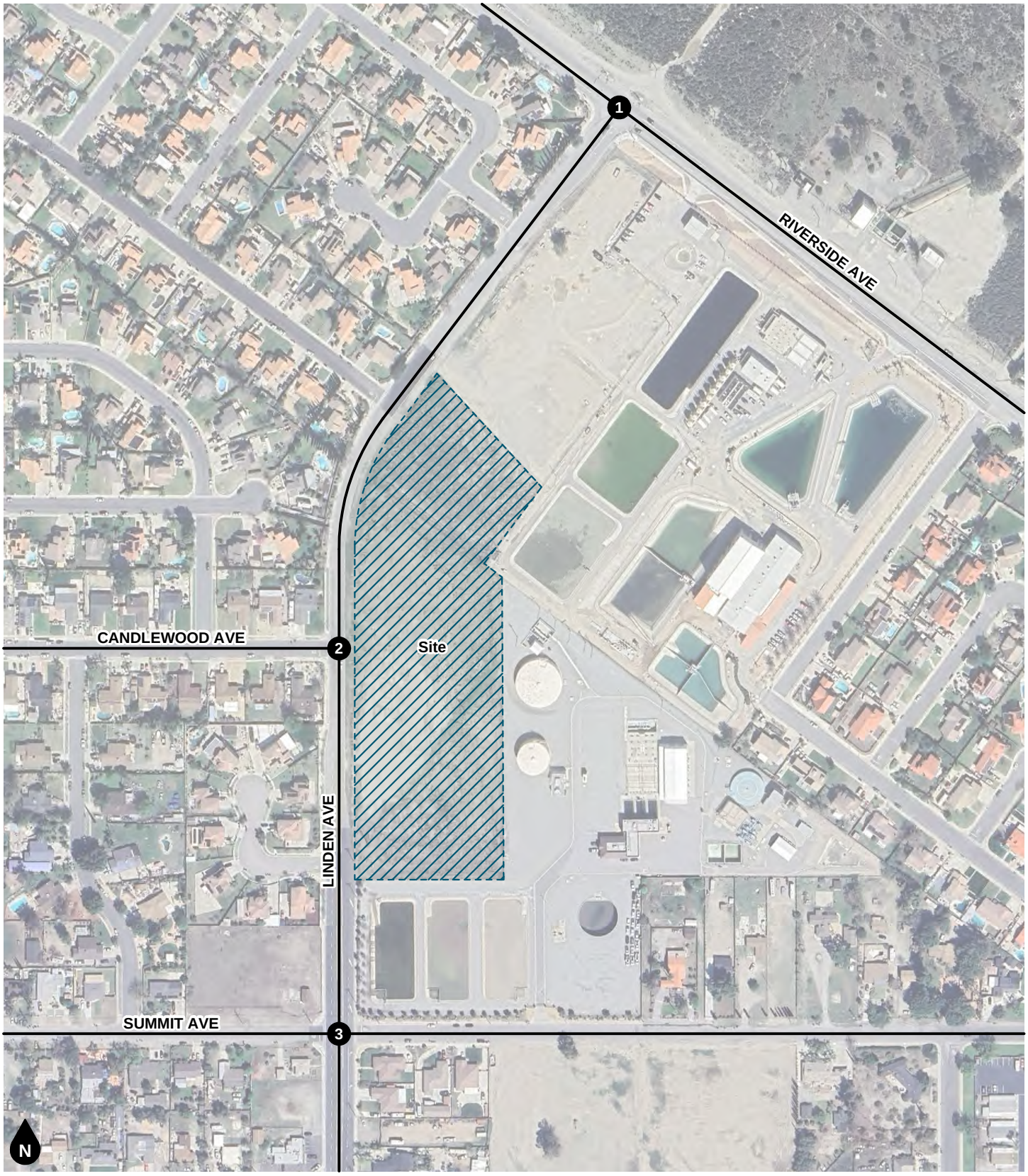
TTM20793 Rialto
19828

Table 1
Project Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Land Use Variable[2]	% In	% Out	Rate	% In	% Out	Rate	Daily Rate
Single-Family Detached Housin	ITE 210	DU	25%	75%	0.70	63%	37%	0.94	9.43

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Single-Family Detached Housing	ITE 210	67 DU	12	35	47	40	23	63	632

Notes:
1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting.
2. DU = Dwelling Unit.



Legend

Study Intersection

Figure 1
Project Location Map

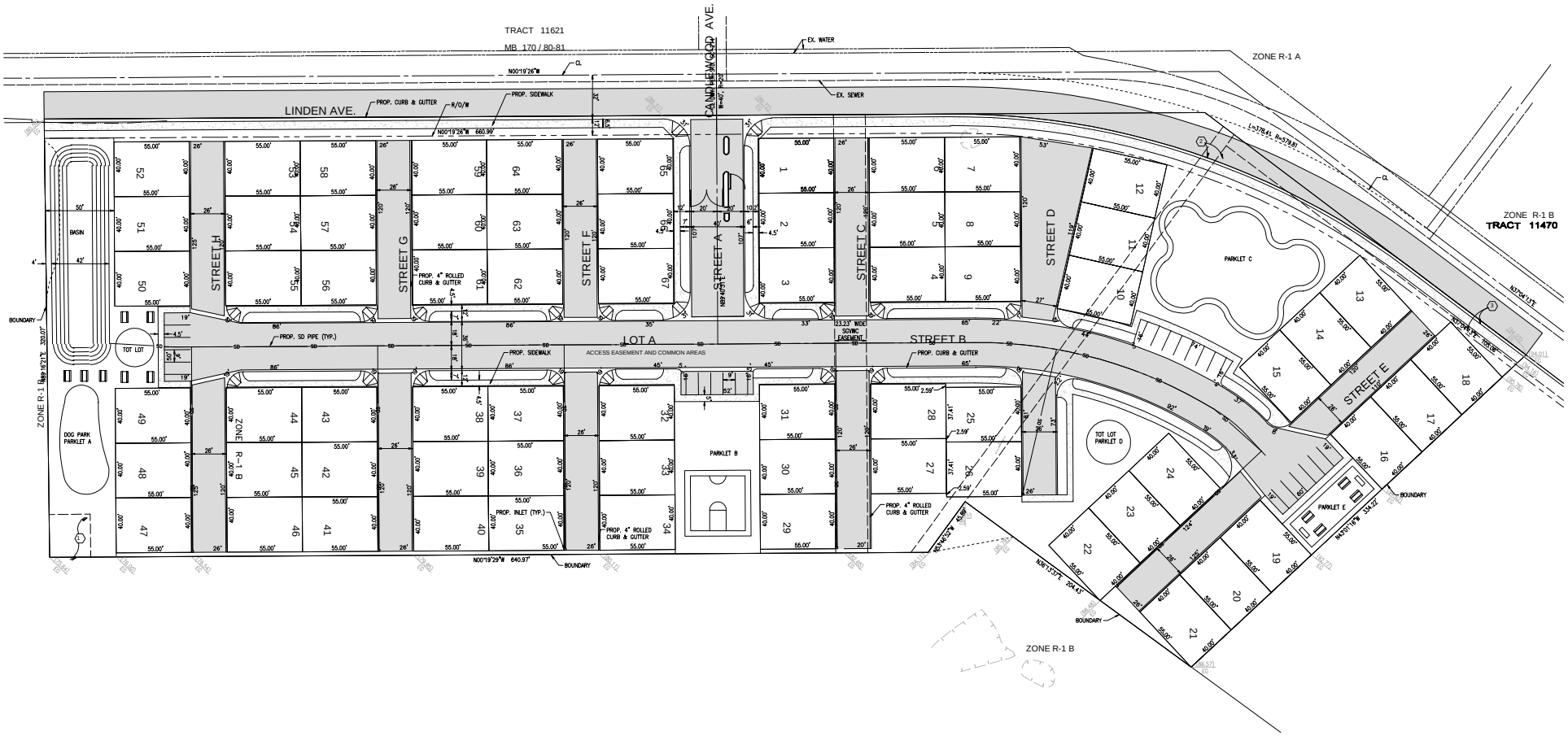


Figure 2
Site Plan

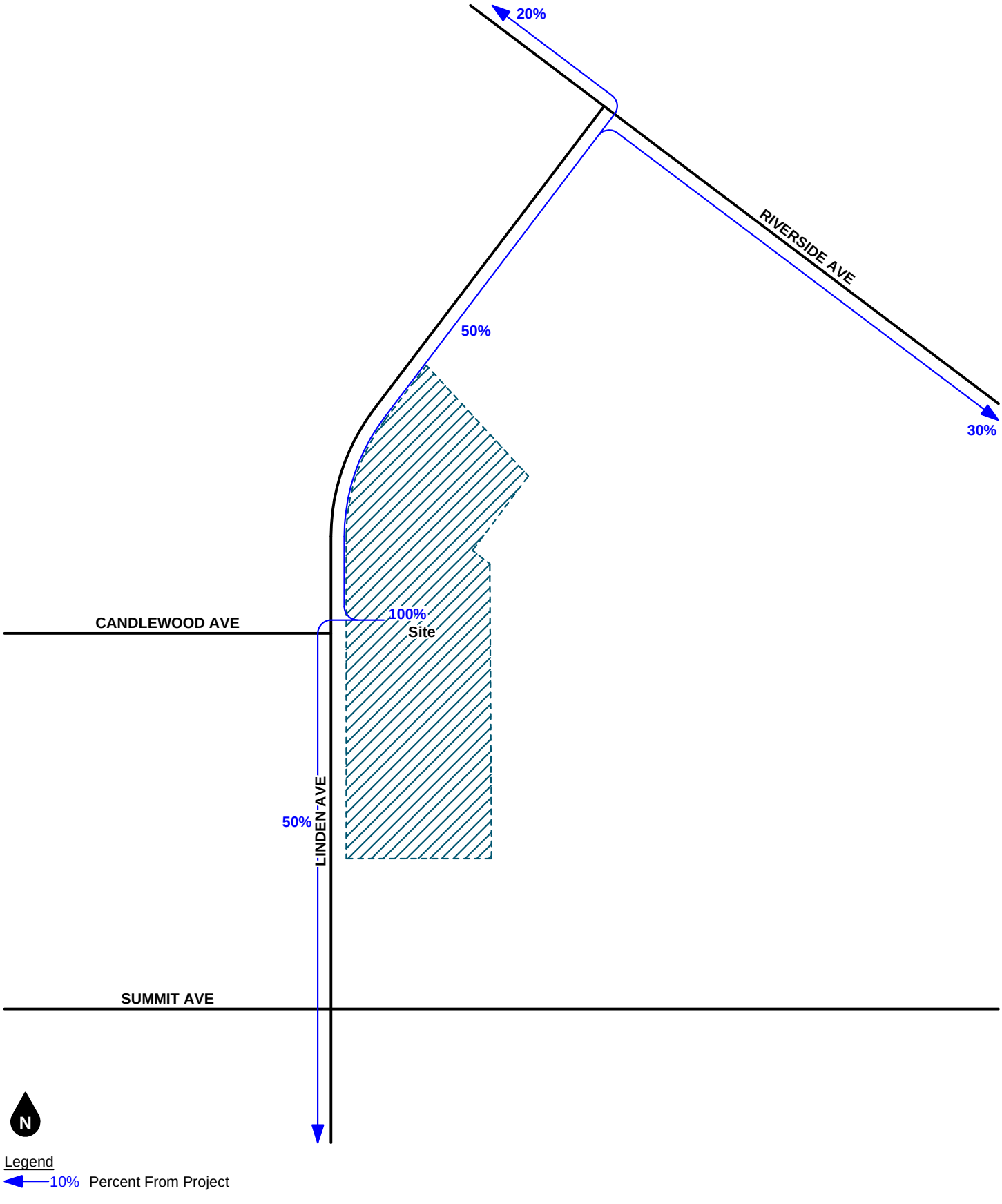


Figure 3
Project Trip Distribution (Outbound)

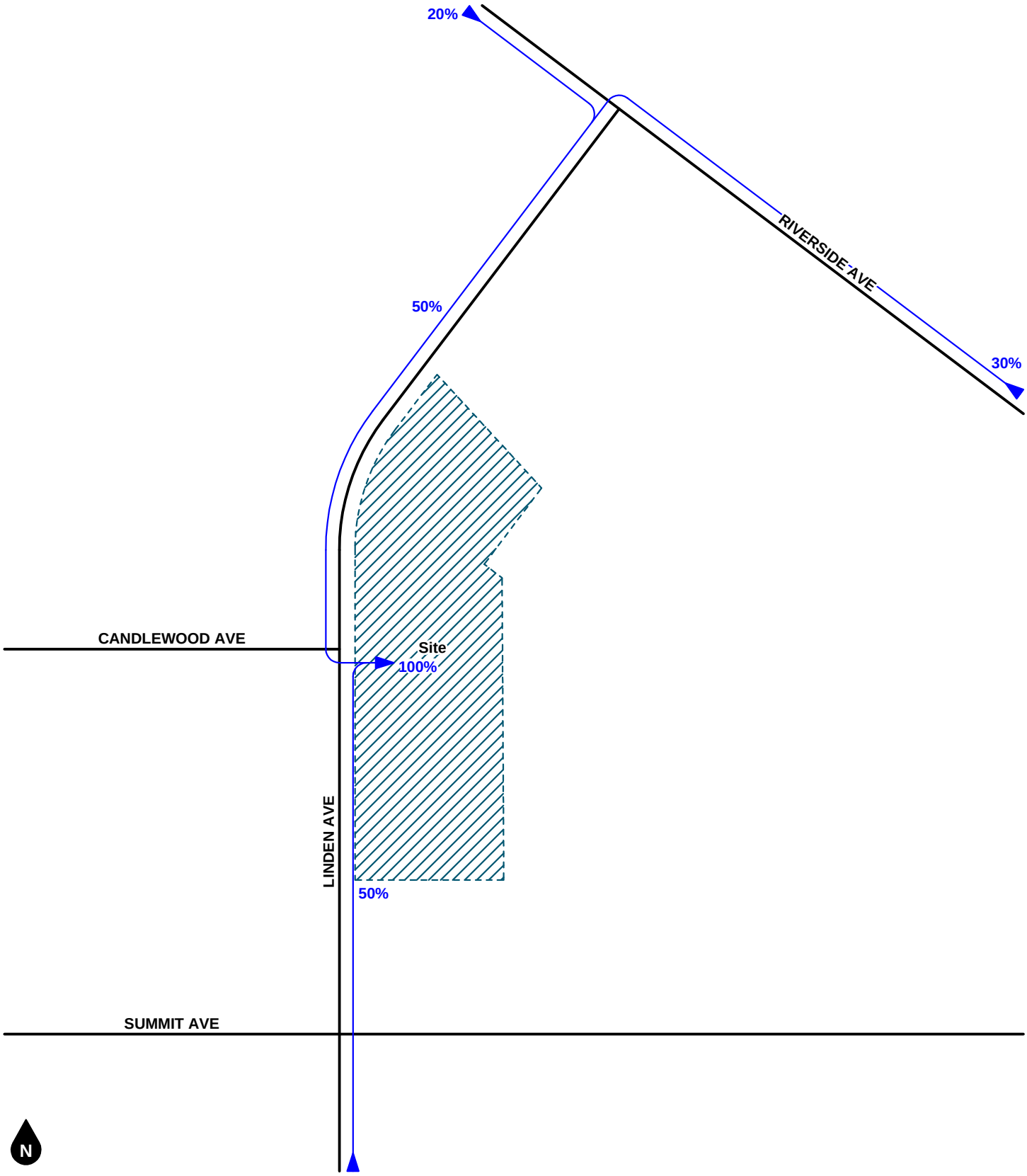
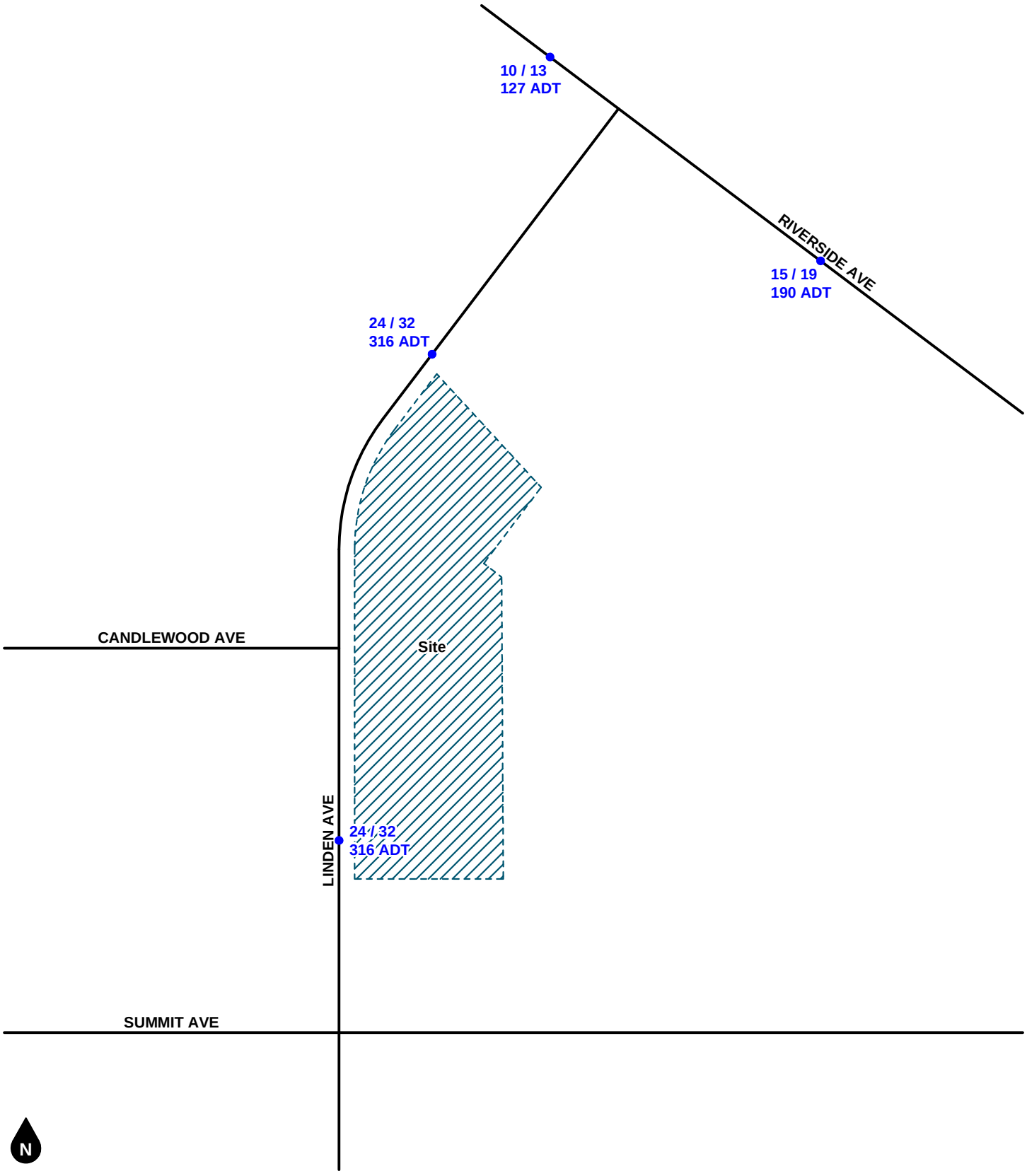


Figure 4
Project Trip Distribution (Inbound)



Legend

AM / PM	Peak Hour Trips
ADT	Average Daily Traffic Volumes

Figure 5
Project Peak Hour Trip Assignment

VMT Analysis Project Scoping Form

This scoping form shall be submitted to the City of Rialto to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	25-0013 **MC20 -** **PPD20 -**
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	TTM20793
Project Address:	Eastside of Linden Avenue approximately 300 feet north of Summit Avenue.
Project Opening Year:	2028
Project Description:	67 single family residential dwelling units.

	Consultant:	**Developer:**
Name:	Ganddini Group, Inc./ Perrie Ilercil	Lytle Development Company
Address:	555 Parkcenter Drive, Suite 225	2050 Main Street, Suite 250
	Santa Ana, California 92705	Irvine, California 92614
Telephone:	714-795-3100 ext 103	
Fax/Email:	perrie@ganddini.com	

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual (11th Edition, 2021)

Current General Plan Land Use: vacant

Proposed General Plan Land Use: Single Family Resd

Current Zoning: Single Family Resd (R-1D)

Proposed Zoning: Single Family Resd

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				12	24	47
PM Trips				40	23	63

Trip Internalization: ☐ Yes ☑ No (_____% Trip Discount)

Pass-By Allowance: ☐ Yes ☑ No (_____% Trip Discount)

Potential Screening Checks

Is the project screened from VMT assessment? ☑ Yes ☐ No

VMT screening justification The project satisfies the Low VMT area screening criteria. See SBCTA Low VMT Screening Tool result attachment.

VMT Scoping

For projects that are not screened, identify the following:

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

Approved by:

Michael Lloyd 7/29/2025

Public Works Department Date

NOTE:

The Applicant/Engineer acknowledges that the Scoping Agreement is intended to assist in the preparation of any required TIA. It is preliminary in nature and the City does not have sufficient data to determine the ultimate conditions that may be imposed for the project. It does not provide nor limit the requirements imposed on the Project but is intended only to provide initial input into the parameters for review of the traffic generated by the Project and the initial areas to be considered and studied. Subsequent changes to scope of required analysis to be included in the TIA may be required by the Transportation Commission, Planning Commission, and/or the City Council upon Public Works Director/City Engineer review and approval

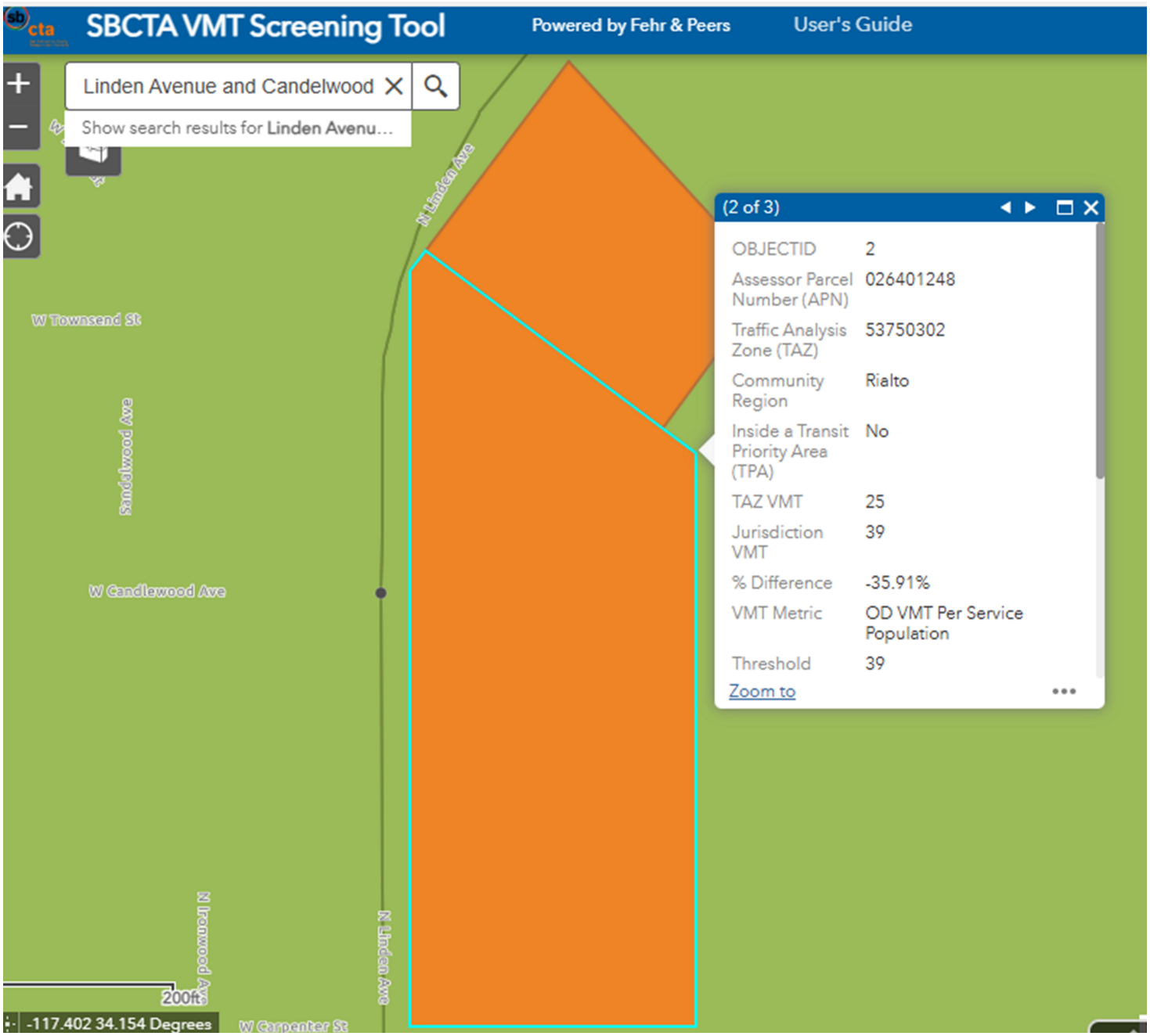
FOR CITY STAFF USE ONLY:

VMT ANALYSIS NEEDED: ___YES _X_NO

INITIALS MDL

ATTACHMENT

VMT SCREENING TOOL RESULTS


SBCTA VMT Screening Tool
Powered by Fehr & Peers
User's Guide
Linden Avenue and Candelwood
Show search results for Linden Avenu...
N Linden Ave
W Townsend St
Sandalwood Ave
W Candlewood Ave
N Ironwood Ave
N Linden Ave
W Carpenter St
200ft
-117.402 34.154 Degrees
(2 of 3)
OBJECTID 2
Assessor Parcel Number (APN) 026401248
Traffic Analysis Zone (TAZ) 53750302
Community Region Rialto
Inside a Transit Priority Area (TPA) No
TAZ VMT 25
Jurisdiction VMT 39
% Difference -35.91%
VMT Metric OD VMT Per Service Population
Threshold 39
Zoom to

APPENDIX C

TRAFFIC COUNT DATA

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

City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

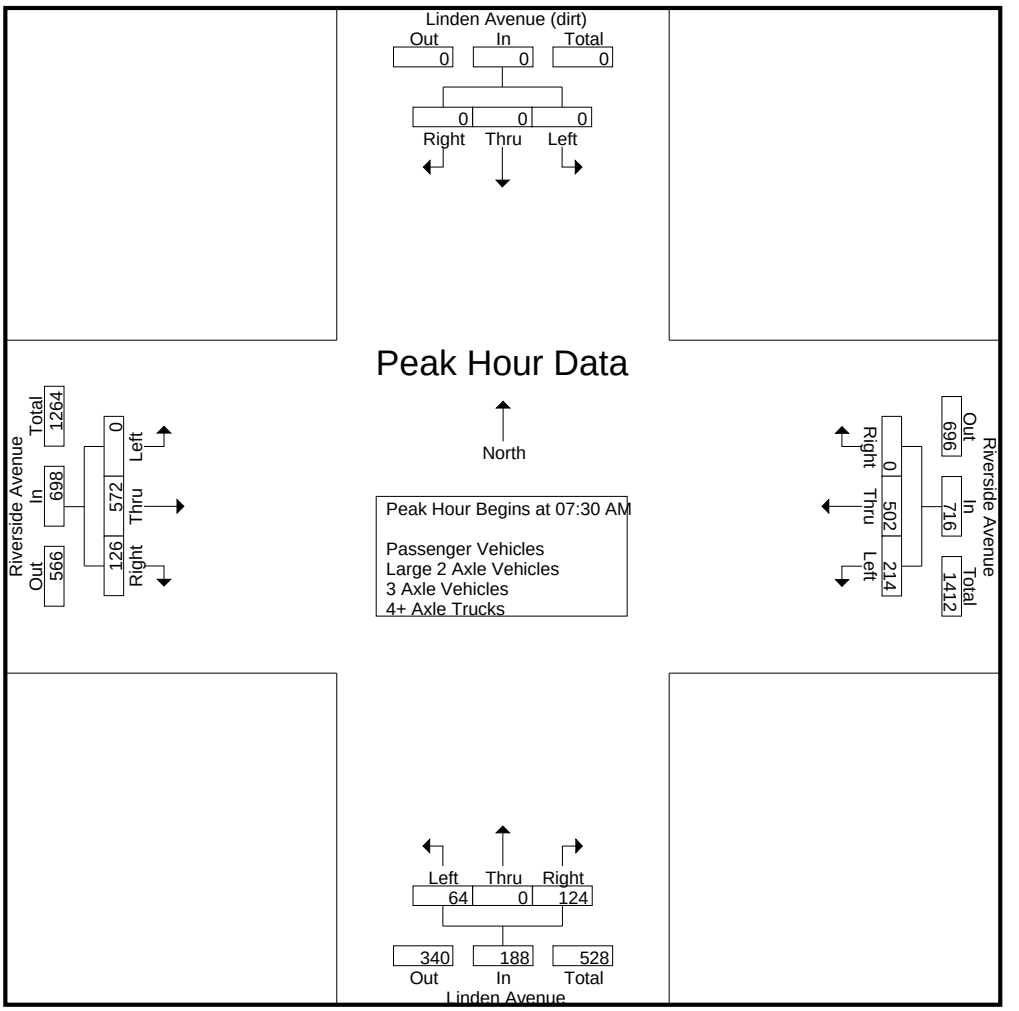
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	8	88	0	96	14	0	7	21	0	122	22	144	261
07:15 AM	0	0	0	0	22	133	0	155	9	0	18	27	0	133	33	166	348
07:30 AM	0	0	0	0	31	160	0	191	32	0	33	65	0	136	17	153	409
07:45 AM	0	0	0	0	38	166	0	204	12	0	18	30	0	179	31	210	444
Total	0	0	0	0	99	547	0	646	67	0	76	143	0	570	103	673	1462
08:00 AM	0	0	0	0	66	107	0	173	9	0	34	43	0	146	35	181	397
08:15 AM	0	0	0	0	79	69	0	148	11	0	39	50	0	111	43	154	352
08:30 AM	0	0	0	0	64	79	0	143	11	0	58	69	0	72	20	92	304
08:45 AM	0	0	0	0	13	74	0	87	10	0	11	21	0	76	14	90	198
Total	0	0	0	0	222	329	0	551	41	0	142	183	0	405	112	517	1251
Grand Total	0	0	0	0	321	876	0	1197	108	0	218	326	0	975	215	1190	2713
Apprch %	0	0	0		26.8	73.2	0		33.1	0	66.9		0	81.9	18.1		
Total %	0	0	0	0	11.8	32.3	0	44.1	4	0	8	12	0	35.9	7.9	43.9	
Passenger Vehicles	0	0	0	0	313	835	0	1148	100	0	213	313	0	926	205	1131	2592
% Passenger Vehicles	0	0	0	0	97.5	95.3	0	95.9	92.6	0	97.7	96	0	95	95.3	95	95.5
Large 2 Axle Vehicles	0	0	0	0	8	24	0	32	7	0	5	12	0	37	10	47	91
% Large 2 Axle Vehicles	0	0	0	0	2.5	2.7	0	2.7	6.5	0	2.3	3.7	0	3.8	4.7	3.9	3.4
3 Axle Vehicles	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
% 3 Axle Vehicles	0	0	0	0	0	0.6	0	0.4	0	0	0	0	0	0.3	0	0.3	0.3
4+ Axle Trucks	0	0	0	0	0	12	0	12	1	0	0	1	0	9	0	9	22
% 4+ Axle Trucks	0	0	0	0	0	1.4	0	1	0.9	0	0	0.3	0	0.9	0	0.8	0.8

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	31	160	0	191	**32**	0	33	**65**	0	136	17	153	409
07:45 AM	0	0	0	0	38	**166**	0	**204**	12	0	18	30	0	**179**	31	**210**	**444**
08:00 AM	0	0	0	0	66	107	0	173	9	0	34	43	0	146	35	181	397
08:15 AM	0	0	0	0	**79**	69	0	148	11	0	**39**	50	0	111	**43**	154	352
Total Volume	0	0	0	0	214	502	0	716	64	0	124	188	0	572	126	698	1602
% App. Total	0	0	0		29.9	70.1	0		34	0	66		0	81.9	18.1		
PHF	.000	.000	.000	.000	.677	.756	.000	.877	.500	.000	.795	.723	.000	.799	.733	.831	.902

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

City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:45 AM				07:15 AM			
+0 mins.	0	0	0	0	22	133	0	155	**12**	0	18	30	0	133	33	166
+15 mins.	0	0	0	0	31	160	0	191	9	0	34	43	0	136	17	153
+30 mins.	0	0	0	0	38	**166**	0	**204**	11	0	39	50	0	**179**	31	**210**
+45 mins.	0	0	0	0	**66**	107	0	173	11	0	**58**	**69**	0	146	**35**	181
Total Volume	0	0	0	0	157	566	0	723	43	0	149	192	0	594	116	710
% App. Total	0	0	0		21.7	78.3	0		22.4	0	77.6		0	83.7	16.3	
PHF	.000	.000	.000	.000	.595	.852	.000	.886	.896	.000	.642	.696	.000	.830	.829	.845

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles

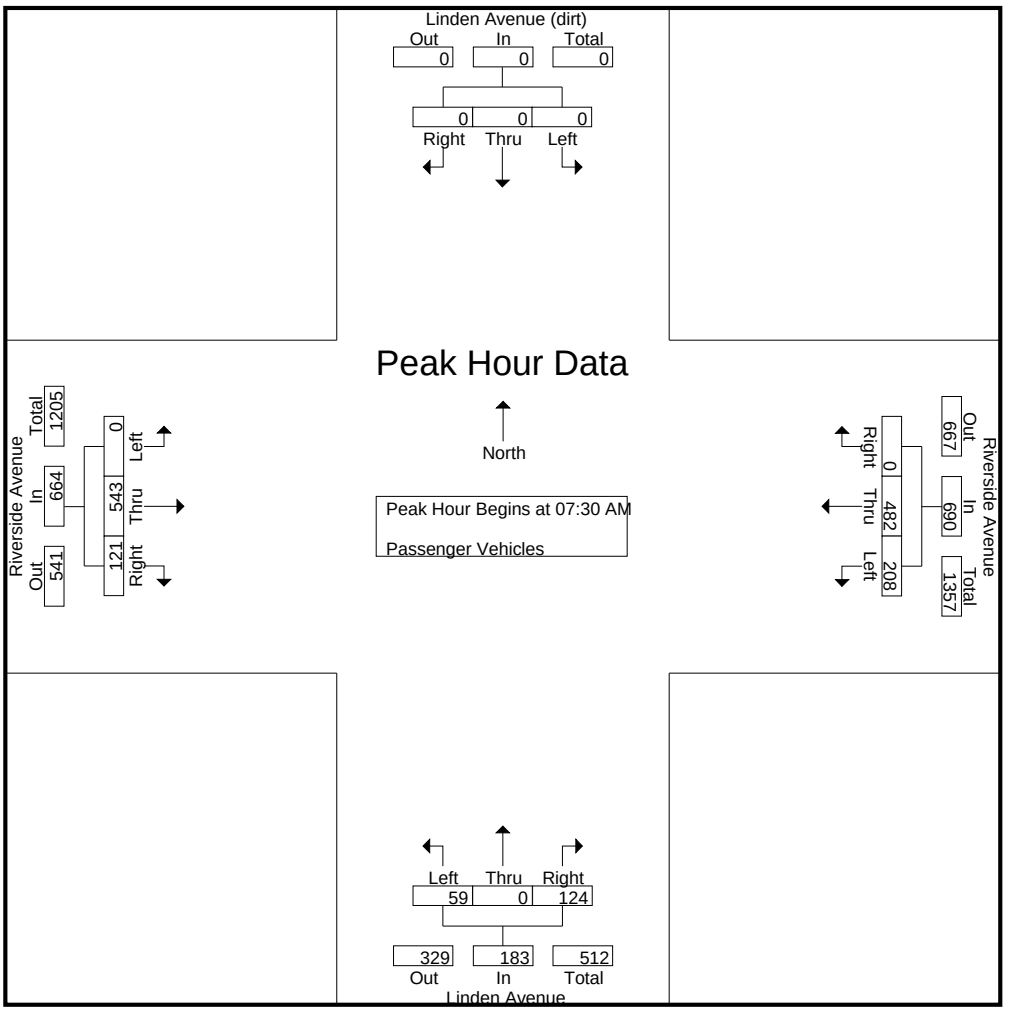
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	7	77	0	84	12	0	7	19	0	115	20	135	238
07:15 AM	0	0	0	0	21	131	0	152	9	0	18	27	0	128	31	159	338
07:30 AM	0	0	0	0	30	150	0	180	29	0	33	62	0	132	17	149	391
07:45 AM	0	0	0	0	37	163	0	200	12	0	18	30	0	168	30	198	428
Total	0	0	0	0	95	521	0	616	62	0	76	138	0	543	98	641	1395
08:00 AM	0	0	0	0	66	104	0	170	7	0	34	41	0	138	33	171	382
08:15 AM	0	0	0	0	75	65	0	140	11	0	39	50	0	105	41	146	336
08:30 AM	0	0	0	0	64	74	0	138	11	0	54	65	0	70	20	90	293
08:45 AM	0	0	0	0	13	71	0	84	9	0	10	19	0	70	13	83	186
Total	0	0	0	0	218	314	0	532	38	0	137	175	0	383	107	490	1197
Grand Total	0	0	0	0	313	835	0	1148	100	0	213	313	0	926	205	1131	2592
Apprch %	0	0	0		27.3	72.7	0		31.9	0	68.1		0	81.9	18.1		
Total %	0	0	0	0	12.1	32.2	0	44.3	3.9	0	8.2	12.1	0	35.7	7.9	43.6	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	30	150	0	180	**29**	0	33	**62**	0	132	17	149	391
07:45 AM	0	0	0	0	37	**163**	0	**200**	12	0	18	30	0	**168**	30	**198**	**428**
08:00 AM	0	0	0	0	66	104	0	170	7	0	34	41	0	138	33	171	382
08:15 AM	0	0	0	0	**75**	65	0	140	11	0	**39**	50	0	105	**41**	146	336
Total Volume	0	0	0	0	208	482	0	690	59	0	124	183	0	543	121	664	1537
% App. Total	0	0	0		30.1	69.9	0		32.2	0	67.8		0	81.8	18.2		
PHF	.000	.000	.000	.000	.693	.739	.000	.863	.509	.000	.795	.738	.000	.808	.738	.838	.898

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	30	150	0	180	**29**	0	33	**62**	0	132	17	149
+15 mins.	0	0	0	0	37	**163**	0	**200**	12	0	18	30	0	**168**	30	**198**
+30 mins.	0	0	0	0	66	104	0	170	7	0	34	41	0	138	33	171
+45 mins.	0	0	0	0	**75**	65	0	140	11	0	**39**	50	0	105	**41**	146
Total Volume	0	0	0	0	208	482	0	690	59	0	124	183	0	543	121	664
% App. Total	0	0	0		30.1	69.9	0		32.2	0	67.8		0	81.8	18.2	
PHF	.000	.000	.000	.000	.693	.739	.000	.863	.509	.000	.795	.738	.000	.808	.738	.838

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Large 2 Axle Vehicles

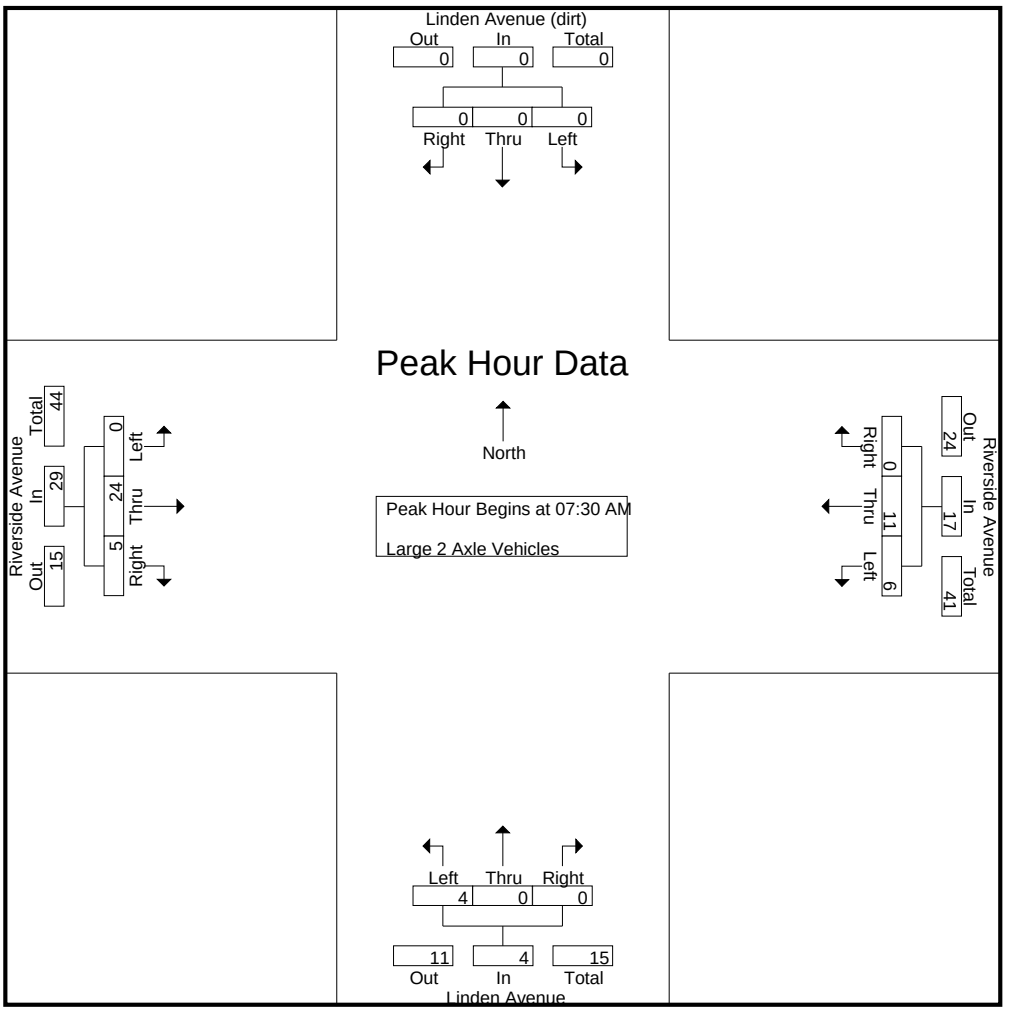
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	9	0	10	2	0	0	2	0	4	2	6	18
07:15 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	4	2	6	8
07:30 AM	0	0	0	0	1	8	0	9	3	0	0	3	0	4	0	4	16
07:45 AM	0	0	0	0	1	2	0	3	0	0	0	0	0	10	1	11	14
Total	0	0	0	0	4	20	0	24	5	0	0	5	0	22	5	27	56
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	8	2	10	11
08:15 AM	0	0	0	0	4	1	0	5	0	0	0	0	0	2	2	4	9
08:30 AM	0	0	0	0	0	1	0	1	0	0	4	4	0	2	0	2	7
08:45 AM	0	0	0	0	0	2	0	2	1	0	1	2	0	3	1	4	8
Total	0	0	0	0	4	4	0	8	2	0	5	7	0	15	5	20	35
Grand Total	0	0	0	0	8	24	0	32	7	0	5	12	0	37	10	47	91
Apprch %	0	0	0		25	75	0		58.3	0	41.7		0	78.7	21.3		
Total %	0	0	0	0	8.8	26.4	0	35.2	7.7	0	5.5	13.2	0	40.7	11	51.6	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	1	**8**	0	**9**	**3**	0	0	**3**	0	4	0	4	**16**
07:45 AM	0	0	0	0	1	2	0	3	0	0	0	0	0	**10**	1	**11**	14
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	8	**2**	10	11
08:15 AM	0	0	0	0	**4**	1	0	5	0	0	0	0	0	2	2	4	9
Total Volume	0	0	0	0	6	11	0	17	4	0	0	4	0	24	5	29	50
% App. Total	0	0	0		35.3	64.7	0		100	0	0		0	82.8	17.2		
PHF	.000	.000	.000	.000	.375	.344	.000	.472	.333	.000	.000	.333	.000	.600	.625	.659	.781

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	1	**8**	0	**9**	**3**	0	0	**3**	0	4	0	4
+15 mins.	0	0	0	0	1	2	0	3	0	0	0	0	0	**10**	1	**11**
+30 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	8	**2**	10
+45 mins.	0	0	0	0	**4**	1	0	5	0	0	0	0	0	2	2	4
Total Volume	0	0	0	0	6	11	0	17	4	0	0	4	0	24	5	29
% App. Total	0	0	0		35.3	64.7	0		100	0	0		0	82.8	17.2	
PHF	.000	.000	.000	.000	.375	.344	.000	.472	.333	.000	.000	.333	.000	.600	.625	.659

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 3 Axle Vehicles

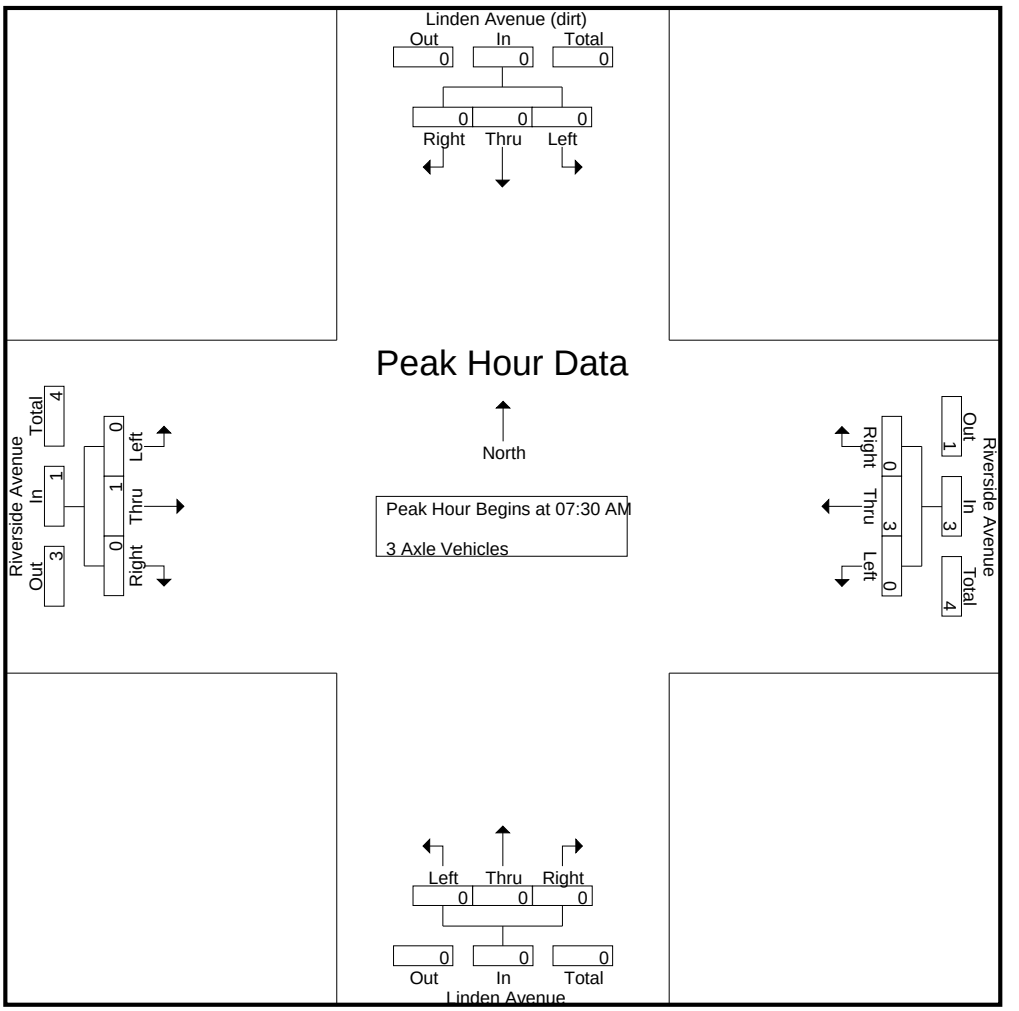
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Grand Total	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	62.5	0	62.5	0	0	0	0	0	37.5	0	37.5	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	**1**	0	**1**	**3**
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.250	.000	.250	.333

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	**1**	0	**1**
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.250	.000	.250

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 4+ Axle Trucks

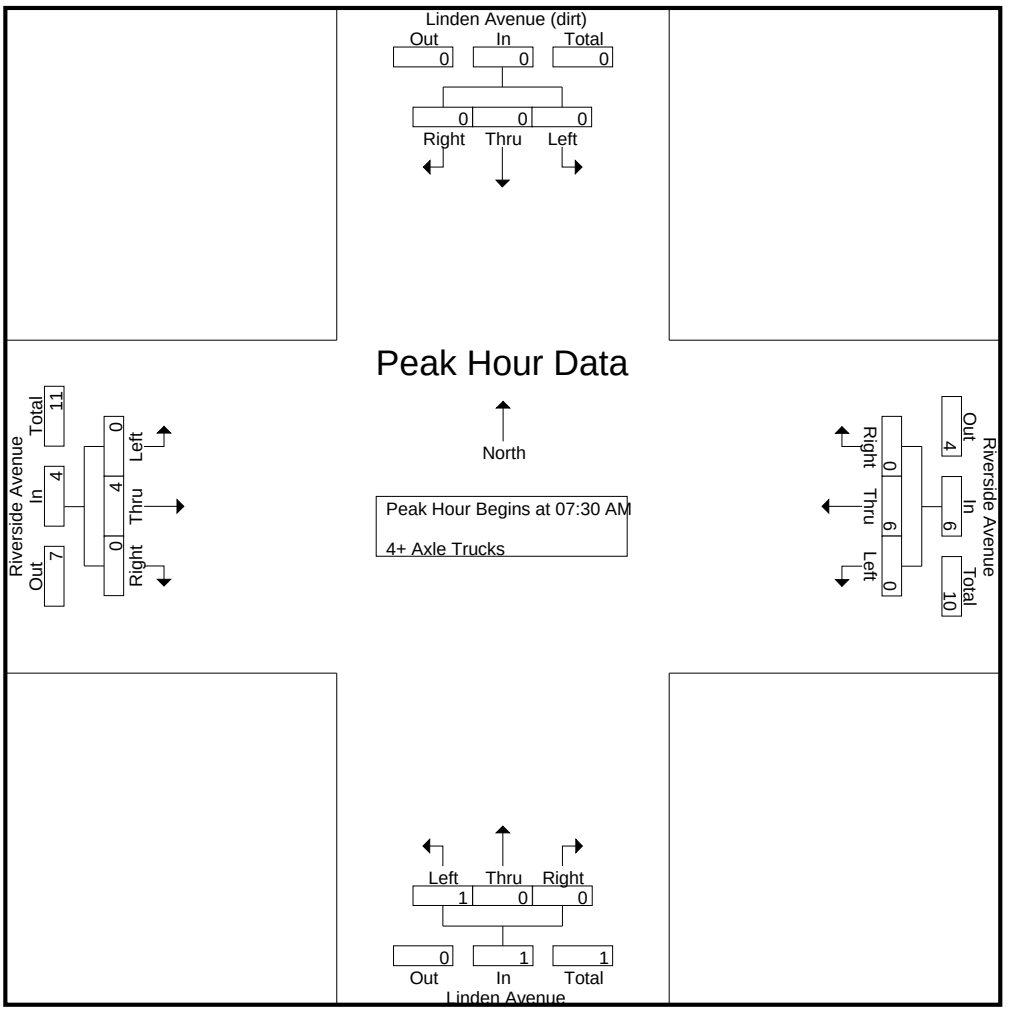
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
08:00 AM	0	0	0	0	0	3	0	3	1	0	0	1	0	0	0	0	4
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	8	0	8	1	0	0	1	0	5	0	5	14
Grand Total	0	0	0	0	0	12	0	12	1	0	0	1	0	9	0	9	22
Apprch %	0	0	0		0	100	0		100	0	0		0	100	0		
Total %	0	0	0	0	0	54.5	0	54.5	4.5	0	0	4.5	0	40.9	0	40.9	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	**3**	0	**3**	**1**	0	0	**1**	0	0	0	0	**4**
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	**3**	0	**3**	4
Total Volume	0	0	0	0	0	6	0	6	1	0	0	1	0	4	0	4	11
% App. Total	0	0	0		0	100	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.333	.000	.333	.688

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	**3**	0	**3**	**1**	0	0	**1**	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**3**	0	**3**
Total Volume	0	0	0	0	0	6	0	6	1	0	0	1	0	4	0	4
% App. Total	0	0	0		0	100	0		100	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.333	.000	.333

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

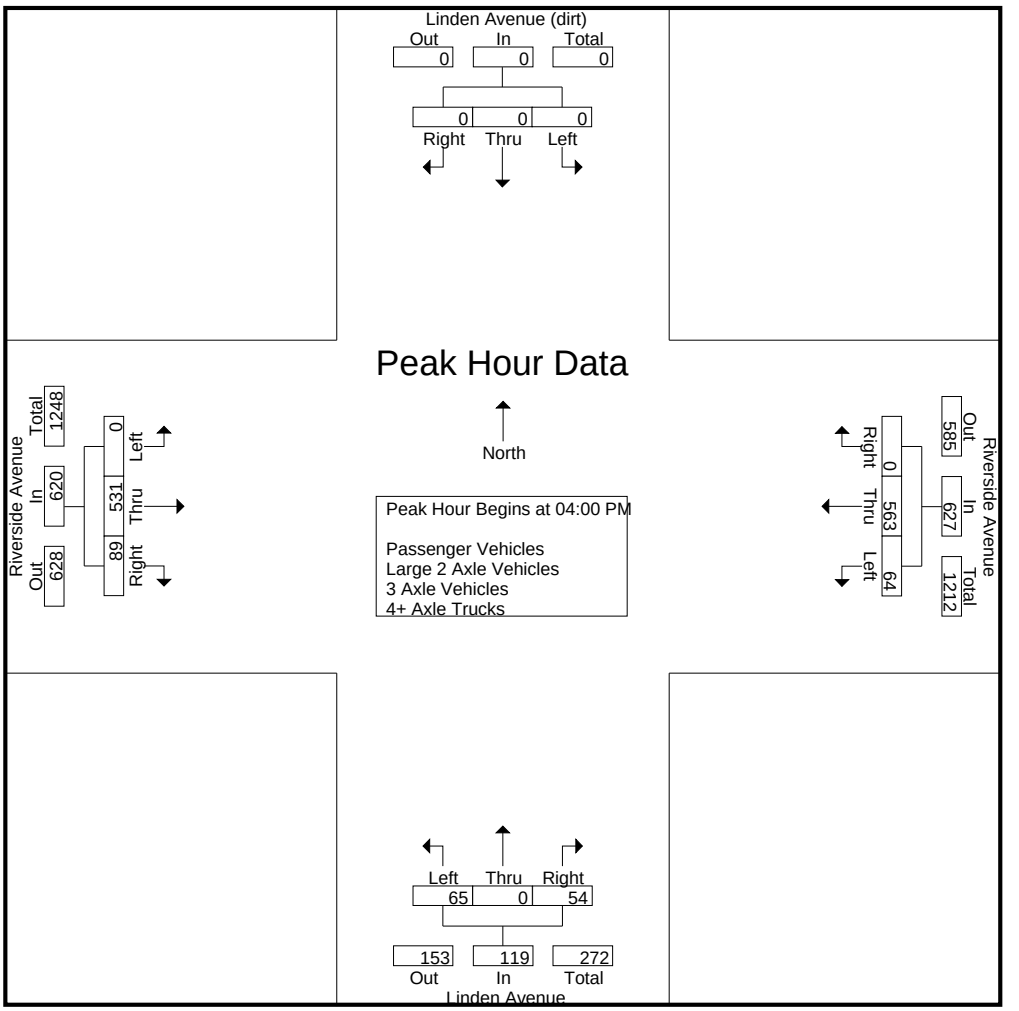
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	15	171	0	186	18	0	19	37	0	108	20	128	351
04:15 PM	0	0	0	0	20	168	0	188	18	0	7	25	0	216	24	240	453
04:30 PM	0	0	0	0	17	114	0	131	17	0	17	34	0	119	22	141	306
04:45 PM	0	0	0	0	12	110	0	122	12	0	11	23	0	88	23	111	256
Total	0	0	0	0	64	563	0	627	65	0	54	119	0	531	89	620	1366
05:00 PM	0	0	0	0	18	117	0	135	30	0	13	43	1	120	30	151	329
05:15 PM	0	0	0	0	9	136	0	145	21	0	11	32	0	95	29	124	301
05:30 PM	0	0	0	0	9	121	0	130	36	0	7	43	0	95	34	129	302
05:45 PM	0	0	0	0	22	97	0	119	21	0	12	33	0	119	32	151	303
Total	0	0	0	0	58	471	0	529	108	0	43	151	1	429	125	555	1235
Grand Total	0	0	0	0	122	1034	0	1156	173	0	97	270	1	960	214	1175	2601
Apprch %	0	0	0		10.6	89.4	0		64.1	0	35.9		0.1	81.7	18.2		
Total %	0	0	0	0	4.7	39.8	0	44.4	6.7	0	3.7	10.4	0	36.9	8.2	45.2	
Passenger Vehicles	0	0	0	0	121	1023	0	1144	169	0	93	262	1	944	207	1152	2558
% Passenger Vehicles	0	0	0	0	99.2	98.9	0	99	97.7	0	95.9	97	100	98.3	96.7	98	98.3
Large 2 Axle Vehicles	0	0	0	0	1	7	0	8	2	0	4	6	0	14	7	21	35
% Large 2 Axle Vehicles	0	0	0	0	0.8	0.7	0	0.7	1.2	0	4.1	2.2	0	1.5	3.3	1.8	1.3
3 Axle Vehicles	0	0	0	0	0	2	0	2	2	0	0	2	0	0	0	0	4
% 3 Axle Vehicles	0	0	0	0	0	0.2	0	0.2	1.2	0	0	0.7	0	0	0	0	0.2
4+ Axle Trucks	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
% 4+ Axle Trucks	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0	0.2	0	0.2	0.2

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	15	**171**	0	186	**18**	0	**19**	**37**	0	108	20	128	351
04:15 PM	0	0	0	0	**20**	168	0	**188**	18	0	7	25	0	**216**	**24**	**240**	**453**
04:30 PM	0	0	0	0	17	114	0	131	17	0	17	34	0	119	22	141	306
04:45 PM	0	0	0	0	12	110	0	122	12	0	11	23	0	88	23	111	256
Total Volume	0	0	0	0	64	563	0	627	65	0	54	119	0	531	89	620	1366
% App. Total	0	0	0		10.2	89.8	0		54.6	0	45.4		0	85.6	14.4		
PHF	.000	.000	.000	.000	.800	.823	.000	.834	.903	.000	.711	.804	.000	.615	.927	.646	.754

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				05:00 PM				04:15 PM			
+0 mins.	0	0	0	0	15	**171**	0	186	30	0	**13**	**43**	0	**216**	24	**240**
+15 mins.	0	0	0	0	**20**	168	0	**188**	21	0	11	32	0	119	22	141
+30 mins.	0	0	0	0	17	114	0	131	**36**	0	7	43	0	88	23	111
+45 mins.	0	0	0	0	12	110	0	122	21	0	12	33	**1**	120	**30**	151
Total Volume	0	0	0	0	64	563	0	627	108	0	43	151	1	543	99	643
% App. Total	0	0	0		10.2	89.8	0		71.5	0	28.5		0.2	84.4	15.4	
PHF	.000	.000	.000	.000	.800	.823	.000	.834	.750	.000	.827	.878	.250	.628	.825	.670

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles

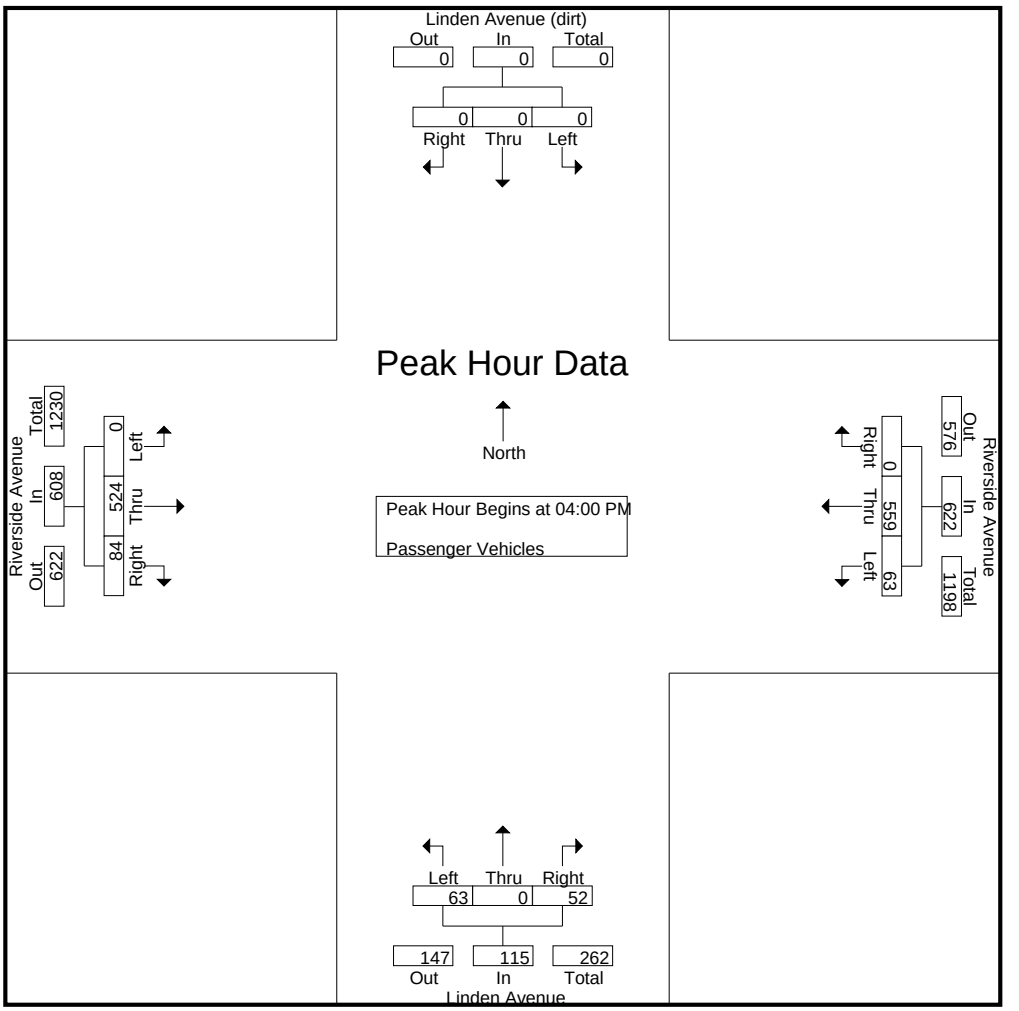
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	15	171	0	186	17	0	18	35	0	108	17	125	346
04:15 PM	0	0	0	0	19	168	0	187	17	0	7	24	0	214	24	238	449
04:30 PM	0	0	0	0	17	112	0	129	17	0	17	34	0	118	20	138	301
04:45 PM	0	0	0	0	12	108	0	120	12	0	10	22	0	84	23	107	249
Total	0	0	0	0	63	559	0	622	63	0	52	115	0	524	84	608	1345
05:00 PM	0	0	0	0	18	116	0	134	28	0	13	41	1	115	29	145	320
05:15 PM	0	0	0	0	9	135	0	144	21	0	9	30	0	93	29	122	296
05:30 PM	0	0	0	0	9	118	0	127	36	0	7	43	0	95	33	128	298
05:45 PM	0	0	0	0	22	95	0	117	21	0	12	33	0	117	32	149	299
Total	0	0	0	0	58	464	0	522	106	0	41	147	1	420	123	544	1213
Grand Total	0	0	0	0	121	1023	0	1144	169	0	93	262	1	944	207	1152	2558
Apprch %	0	0	0		10.6	89.4	0		64.5	0	35.5		0.1	81.9	18		
Total %	0	0	0	0	4.7	40	0	44.7	6.6	0	3.6	10.2	0	36.9	8.1	45	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	15	**171**	0	186	**17**	0	**18**	**35**	0	108	17	125	346
04:15 PM	0	0	0	0	**19**	168	0	**187**	17	0	7	24	0	**214**	**24**	**238**	**449**
04:30 PM	0	0	0	0	17	112	0	129	17	0	17	34	0	118	20	138	301
04:45 PM	0	0	0	0	12	108	0	120	12	0	10	22	0	84	23	107	249
Total Volume	0	0	0	0	63	559	0	622	63	0	52	115	0	524	84	608	1345
% App. Total	0	0	0		10.1	89.9	0		54.8	0	45.2		0	86.2	13.8		
PHF	.000	.000	.000	.000	.829	.817	.000	.832	.926	.000	.722	.821	.000	.612	.875	.639	.749

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	15	**171**	0	186	**17**	0	**18**	**35**	0	108	17	125
+15 mins.	0	0	0	0	**19**	168	0	**187**	17	0	7	24	0	**214**	**24**	**238**
+30 mins.	0	0	0	0	17	112	0	129	17	0	17	34	0	118	20	138
+45 mins.	0	0	0	0	12	108	0	120	12	0	10	22	0	84	23	107
Total Volume	0	0	0	0	63	559	0	622	63	0	52	115	0	524	84	608
% App. Total	0	0	0		10.1	89.9	0		54.8	0	45.2		0	86.2	13.8	
PHF	.000	.000	.000	.000	.829	.817	.000	.832	.926	.000	.722	.821	.000	.612	.875	.639

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Large 2 Axle Vehicles

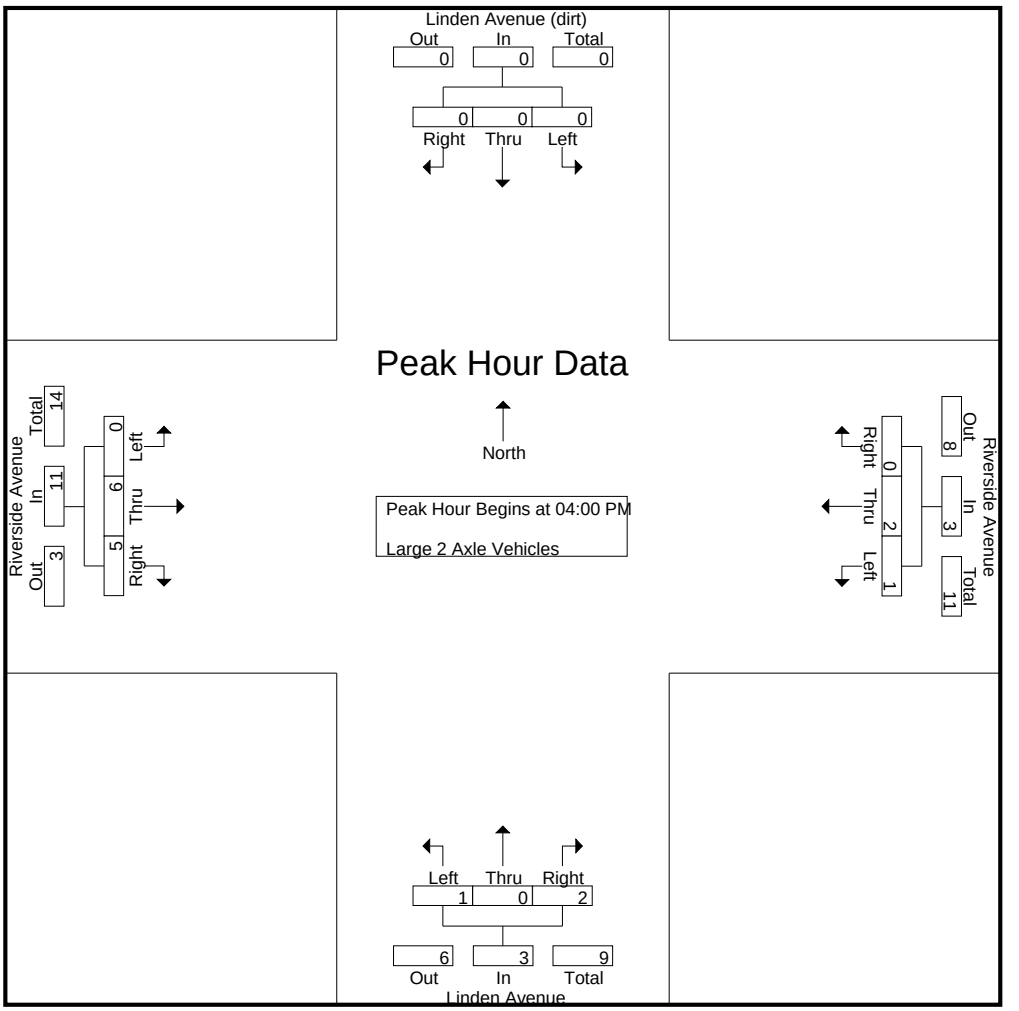
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	3	3	5
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	2	3	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	4	0	4	5
Total	0	0	0	0	1	2	0	3	1	0	2	3	0	6	5	11	17
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	5	1	6	7
05:15 PM	0	0	0	0	0	1	0	1	0	0	2	2	0	2	0	2	5
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	1	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	5	0	5	1	0	2	3	0	8	2	10	18
Grand Total	0	0	0	0	1	7	0	8	2	0	4	6	0	14	7	21	35
Apprch %	0	0	0		12.5	87.5	0		33.3	0	66.7		0	66.7	33.3		
Total %	0	0	0	0	2.9	20	0	22.9	5.7	0	11.4	17.1	0	40	20	60	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	**1**	0	**1**	**2**	0	0	**3**	3	**5**
04:15 PM	0	0	0	0	**1**	0	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	1	2	3	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	**4**	0	**4**	5
Total Volume	0	0	0	0	1	2	0	3	1	0	2	3	0	6	5	11	17
% App. Total	0	0	0		33.3	66.7	0		33.3	0	66.7		0	54.5	45.5		
PHF	.000	.000	.000	.000	.250	.250	.000	.375	.250	.000	.500	.375	.000	.375	.417	.688	.850

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	**1**	0	**1**	**2**	0	0	**3**	3
+15 mins.	0	0	0	0	**1**	0	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	1	2	3
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	**4**	0	**4**
Total Volume	0	0	0	0	1	2	0	3	1	0	2	3	0	6	5	11
% App. Total	0	0	0		33.3	66.7	0		33.3	0	66.7		0	54.5	45.5	
PHF	.000	.000	.000	.000	.250	.250	.000	.375	.250	.000	.500	.375	.000	.375	.417	.688

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 3 Axle Vehicles

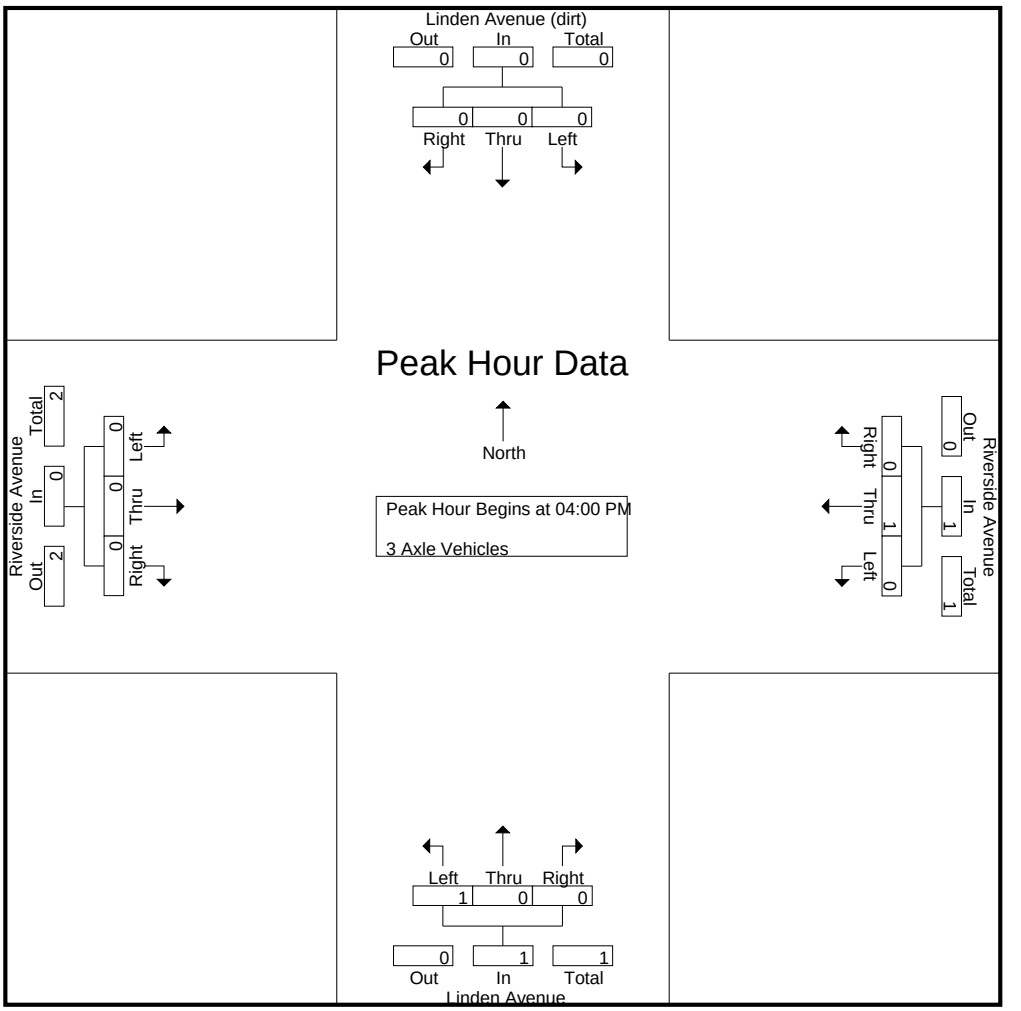
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
05:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
Grand Total	0	0	0	0	0	2	0	2	2	0	0	2	0	0	0	0	4
Apprch %	0	0	0		0	100	0		100	0	0		0	0	0		
Total %	0	0	0	0	0	50	0	50	50	0	0	50	0	0	0	0	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	**1**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
% App. Total	0	0	0		0	100	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.000	.000	.000	.000	.500

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0
% App. Total	0	0	0		0	100	0		100	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 4+ Axle Trucks

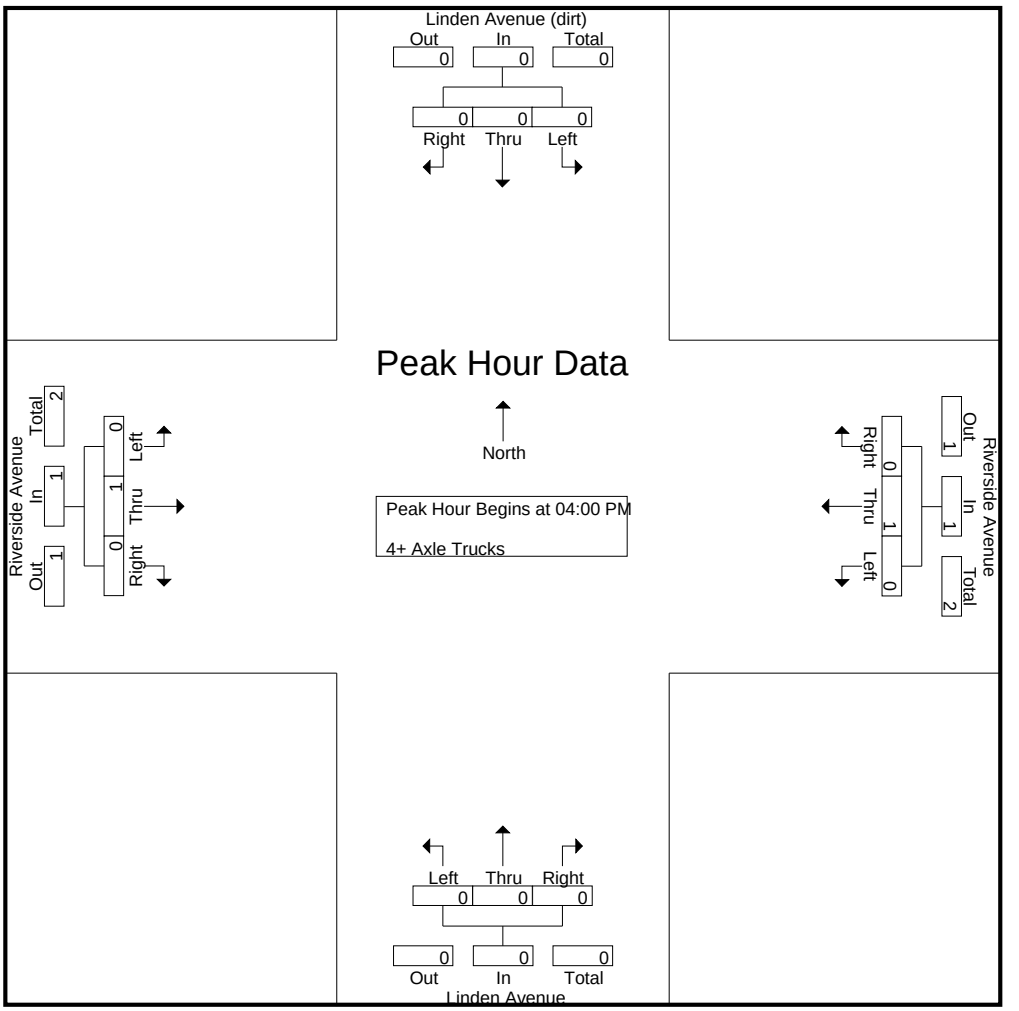
	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Grand Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	50	0	50	0	0	0	0	0	50	0	50	

	Linden Avenue (dirt) Southbound				Riverside Avenue Westbound				Linden Avenue Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**1**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

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City of Rialto
N/S: Linden Avenue
E/W: Riverside Avenue
Weather: Clear

File Name : 01_RLT_Lin_Riv PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

Location: Rialto
N/S: Linden Avenue
E/W: Riverside Avenue

Date: 8/19/2025
Day: Tuesday

PEDESTRIANS

	North Leg Linden Avenue	East Leg Riverside Avenue	South Leg Linden Avenue	West Leg Riverside Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	2	0	2

	North Leg Linden Avenue	East Leg Riverside Avenue	South Leg Linden Avenue	West Leg Riverside Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	2	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
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	2	0	2
TOTAL VOLUMES:	0	0	4	0	4

Location: Rialto
N/S: Linden Avenue
E/W: Riverside Avenue

Date: 8/19/2025
Day: Tuesday

BICYCLES

	Southbound Linden Avenue			Westbound Riverside Avenue			Northbound Linden Avenue			Eastbound Riverside Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	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
7:30 AM	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
8:00 AM	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
8:30 AM	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
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Linden Avenue			Westbound Riverside Avenue			Northbound Linden Avenue			Eastbound Riverside Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	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
4:30 PM	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
5:00 PM	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
5:30 PM	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
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

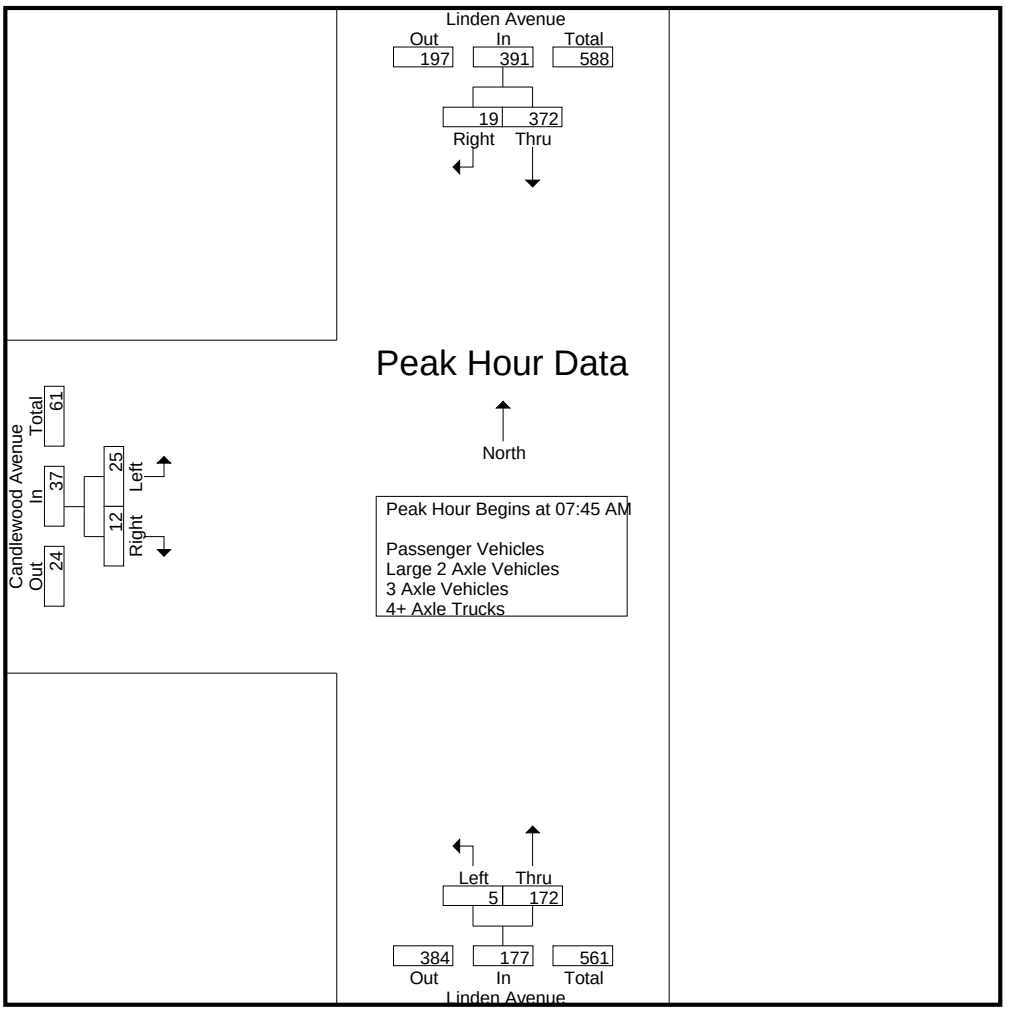
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	37	1	38	0	16	16	5	0	5	59
07:15 AM	60	1	61	2	21	23	6	8	14	98
07:30 AM	46	3	49	0	36	36	17	7	24	109
07:45 AM	72	4	76	2	20	22	8	4	12	110
Total	215	9	224	4	93	97	36	19	55	376
08:00 AM	98	6	104	0	34	34	5	0	5	143
08:15 AM	119	2	121	2	47	49	6	4	10	180
08:30 AM	83	7	90	1	71	72	6	4	10	172
08:45 AM	28	5	33	0	20	20	1	1	2	55
Total	328	20	348	3	172	175	18	9	27	550
Grand Total	543	29	572	7	265	272	54	28	82	926
Apprch %	94.9	5.1		2.6	97.4		65.9	34.1		
Total %	58.6	3.1	61.8	0.8	28.6	29.4	5.8	3	8.9	
Passenger Vehicles	540	29	569	7	263	270	53	27	80	919
% Passenger Vehicles	99.4	100	99.5	100	99.2	99.3	98.1	96.4	97.6	99.2
Large 2 Axle Vehicles	2	0	2	0	1	1	1	1	2	5
% Large 2 Axle Vehicles	0.4	0	0.3	0	0.4	0.4	1.9	3.6	2.4	0.5
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	1	0	1	0	1	1	0	0	0	2
% 4+ Axle Trucks	0.2	0	0.2	0	0.4	0.4	0	0	0	0.2

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	72	4	76	**2**	20	22	**8**	**4**	**12**	110
08:00 AM	98	6	104	0	34	34	5	0	5	143
08:15 AM	**119**	2	**121**	2	47	49	6	4	10	**180**
08:30 AM	83	**7**	90	1	**71**	**72**	6	4	10	172
Total Volume	372	19	391	5	172	177	25	12	37	605
% App. Total	95.1	4.9		2.8	97.2		67.6	32.4		
PHF	.782	.679	.808	.625	.606	.615	.781	.750	.771	.840

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:00 AM		
+0 mins.	72	4	76	**2**	20	22	5	0	5
+15 mins.	98	6	104	0	34	34	6	**8**	14
+30 mins.	**119**	2	**121**	2	47	49	**17**	7	**24**
+45 mins.	83	**7**	90	1	**71**	**72**	8	4	12
Total Volume	372	19	391	5	172	177	36	19	55
% App. Total	95.1	4.9		2.8	97.2		65.5	34.5	
PHF	.782	.679	.808	.625	.606	.615	.529	.594	.573

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles

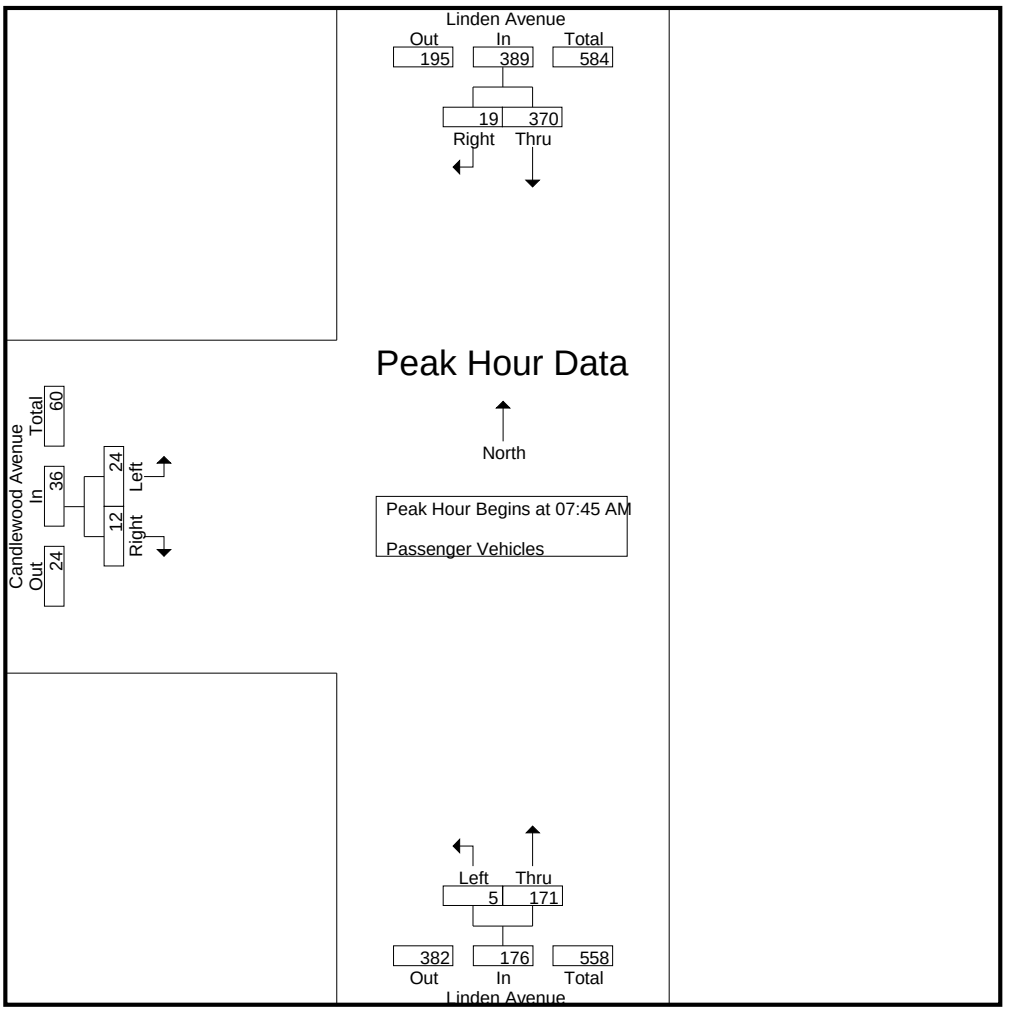
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	36	1	37	0	16	16	5	0	5	58
07:15 AM	60	1	61	2	21	23	6	8	14	98
07:30 AM	46	3	49	0	36	36	17	7	24	109
07:45 AM	71	4	75	2	20	22	8	4	12	109
Total	213	9	222	4	93	97	36	19	55	374
08:00 AM	97	6	103	0	33	33	5	0	5	141
08:15 AM	119	2	121	2	47	49	6	4	10	180
08:30 AM	83	7	90	1	71	72	5	4	9	171
08:45 AM	28	5	33	0	19	19	1	0	1	53
Total	327	20	347	3	170	173	17	8	25	545
Grand Total	540	29	569	7	263	270	53	27	80	919
Apprch %	94.9	5.1		2.6	97.4		66.2	33.8		
Total %	58.8	3.2	61.9	0.8	28.6	29.4	5.8	2.9	8.7	

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	71	4	75	**2**	20	22	**8**	**4**	**12**	109
08:00 AM	97	6	103	0	33	33	5	0	5	141
08:15 AM	**119**	2	**121**	2	47	49	6	4	10	**180**
08:30 AM	83	**7**	90	1	**71**	**72**	5	4	9	171
Total Volume	370	19	389	5	171	176	24	12	36	601
% App. Total	95.1	4.9		2.8	97.2		66.7	33.3		
PHF	.777	.679	.804	.625	.602	.611	.750	.750	.750	.835

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City of Rialto
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E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	71	4	75	**2**	20	22	**8**	**4**	**12**
+15 mins.	97	6	103	0	33	33	5	0	5
+30 mins.	**119**	2	**121**	2	47	49	6	4	10
+45 mins.	83	**7**	90	1	**71**	**72**	5	4	9
Total Volume	370	19	389	5	171	176	24	12	36
% App. Total	95.1	4.9		2.8	97.2		66.7	33.3	
PHF	.777	.679	.804	.625	.602	.611	.750	.750	.750

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Large 2 Axle Vehicles

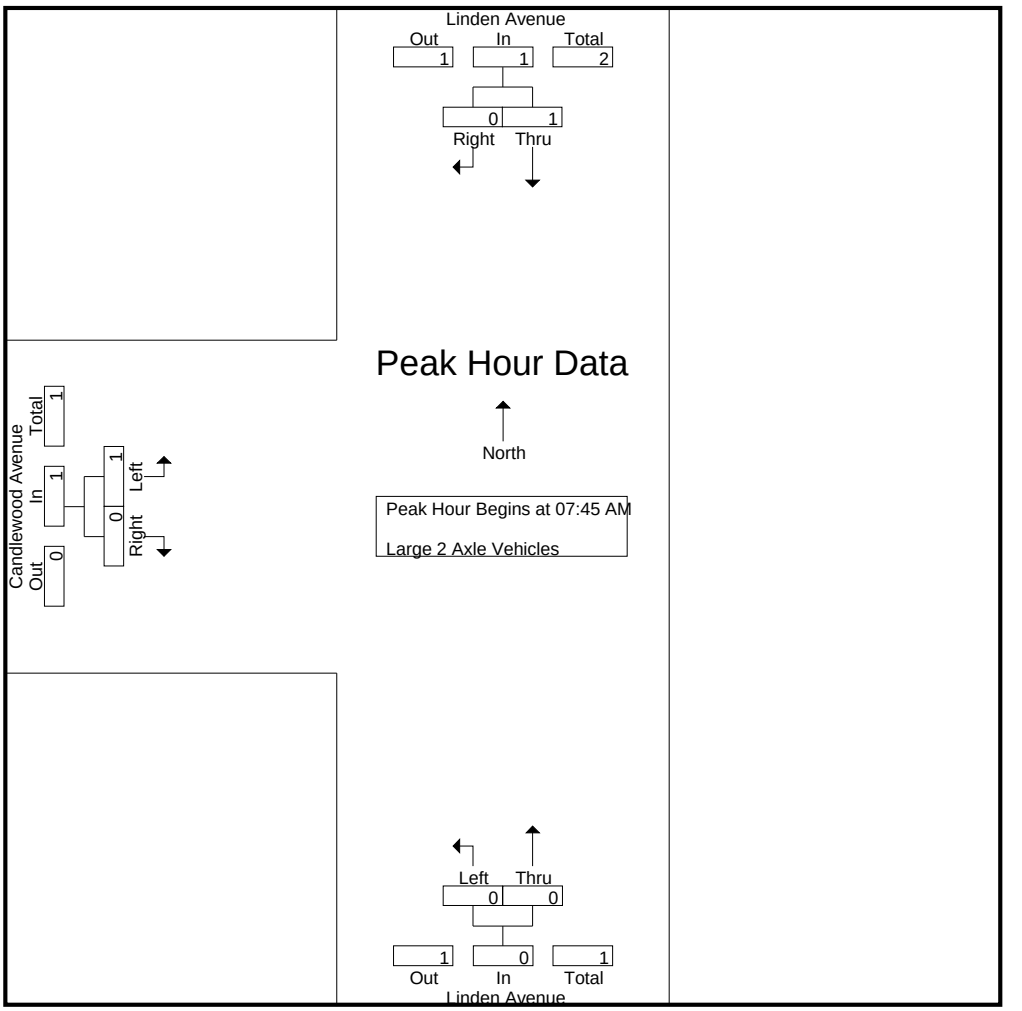
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	1	0	1	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	1	0	1	0	0	0	0	0	0	1
Total	2	0	2	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	1	1	0	1	1	2
Total	0	0	0	0	1	1	1	1	2	3
Grand Total	2	0	2	0	1	1	1	1	2	5
Apprch %	100	0		0	100		50	50		
Total %	40	0	40	0	20	20	20	20	40	

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	**1**	0	**1**	0	0	0	0	0	0	**1**
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	**1**	0	**1**	1
Total Volume	1	0	1	0	0	0	1	0	1	2
% App. Total	100	0		0	0		100	0		
PHF	.250	.000	.250	.000	.000	.000	.250	.000	.250	.500

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	**1**	0	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	**1**	0	**1**
Total Volume	1	0	1	0	0	0	1	0	1
% App. Total	100	0		0	0		100	0	
PHF	.250	.000	.250	.000	.000	.000	.250	.000	.250

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 3 Axle Vehicles

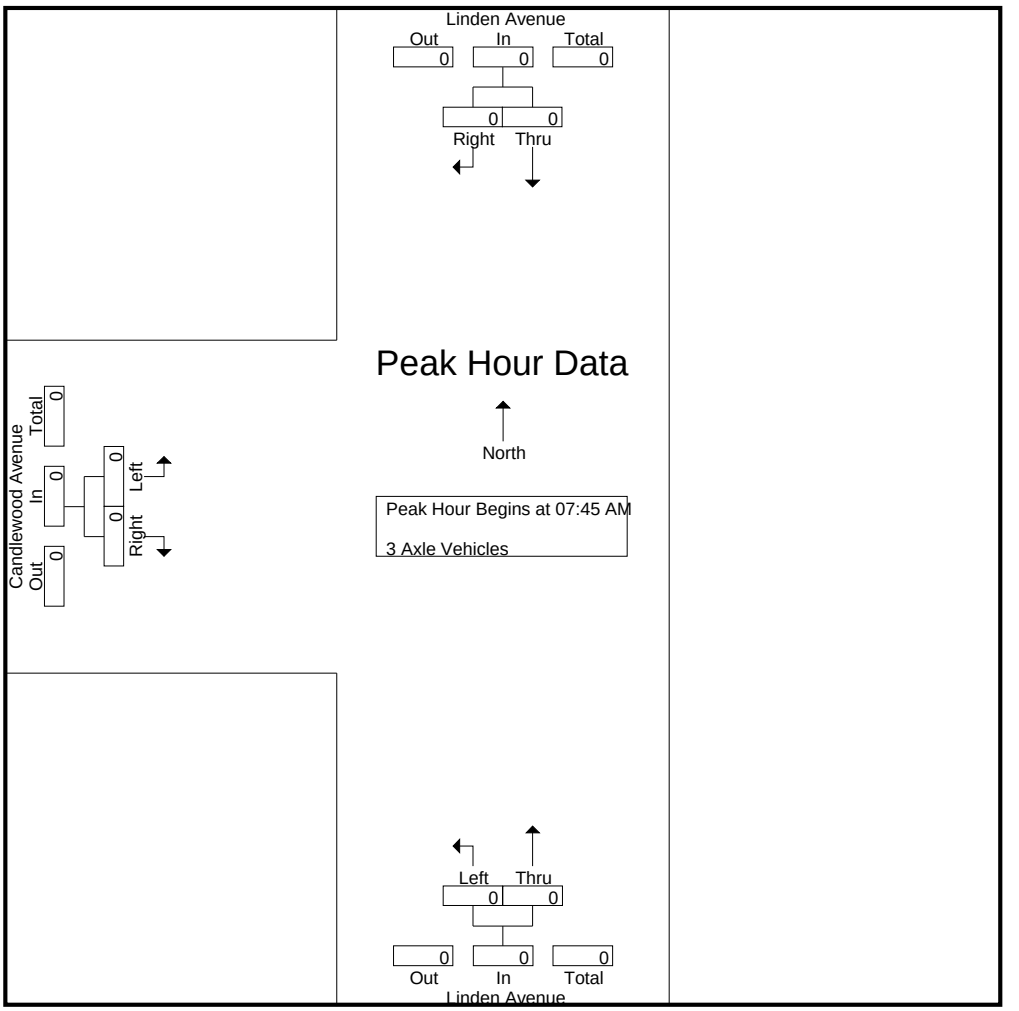
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 4+ Axle Trucks

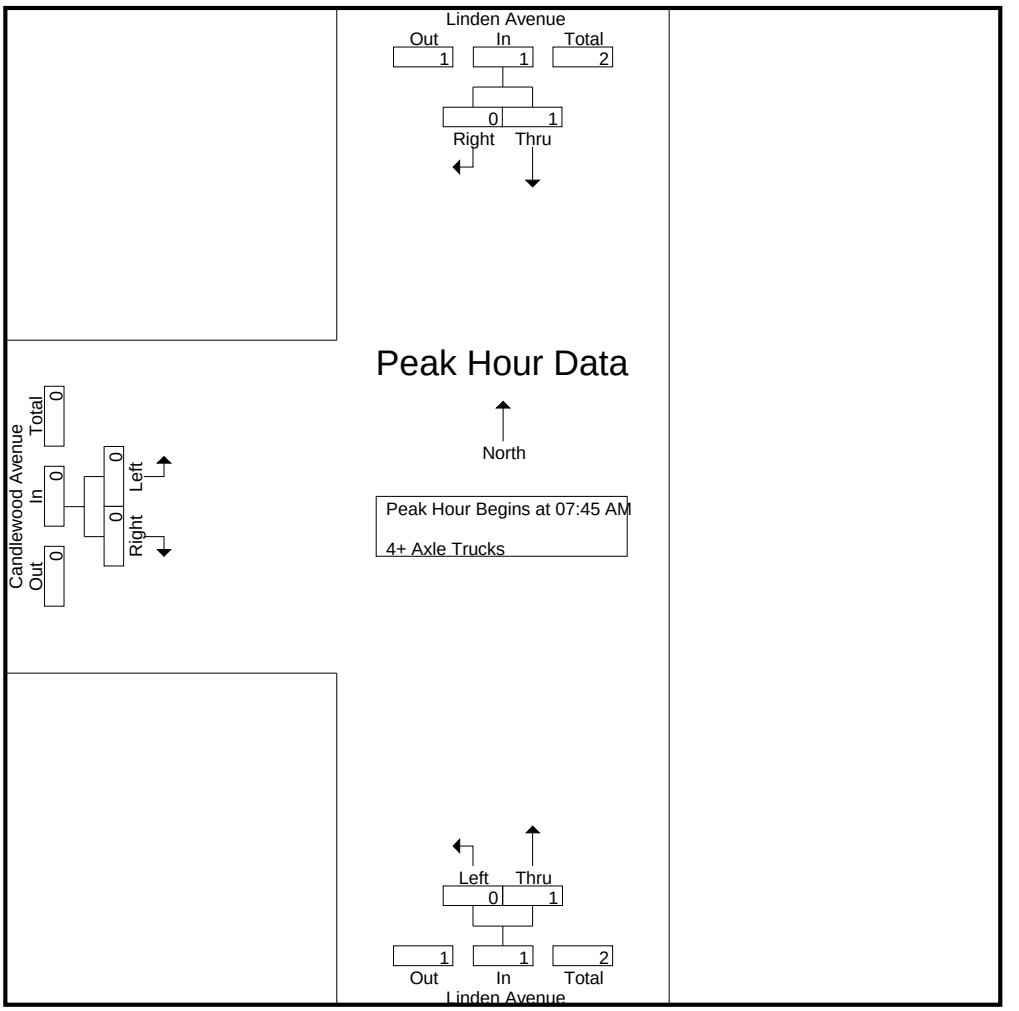
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	1	0	1	0	1	1	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	1	1	0	0	0	2
Grand Total	1	0	1	0	1	1	0	0	0	2
Apprch %	100	0		0	100		0	0		
Total %	50	0	50	0	50	50	0	0	0	

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	**1**	0	**1**	0	**1**	**1**	0	0	0	**2**
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	1	1	0	0	0	2
% App. Total	100	0		0	100		0	0		
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000	.250

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City of Rialto
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E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	**1**	0	**1**	0	**1**	**1**	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	1	1	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

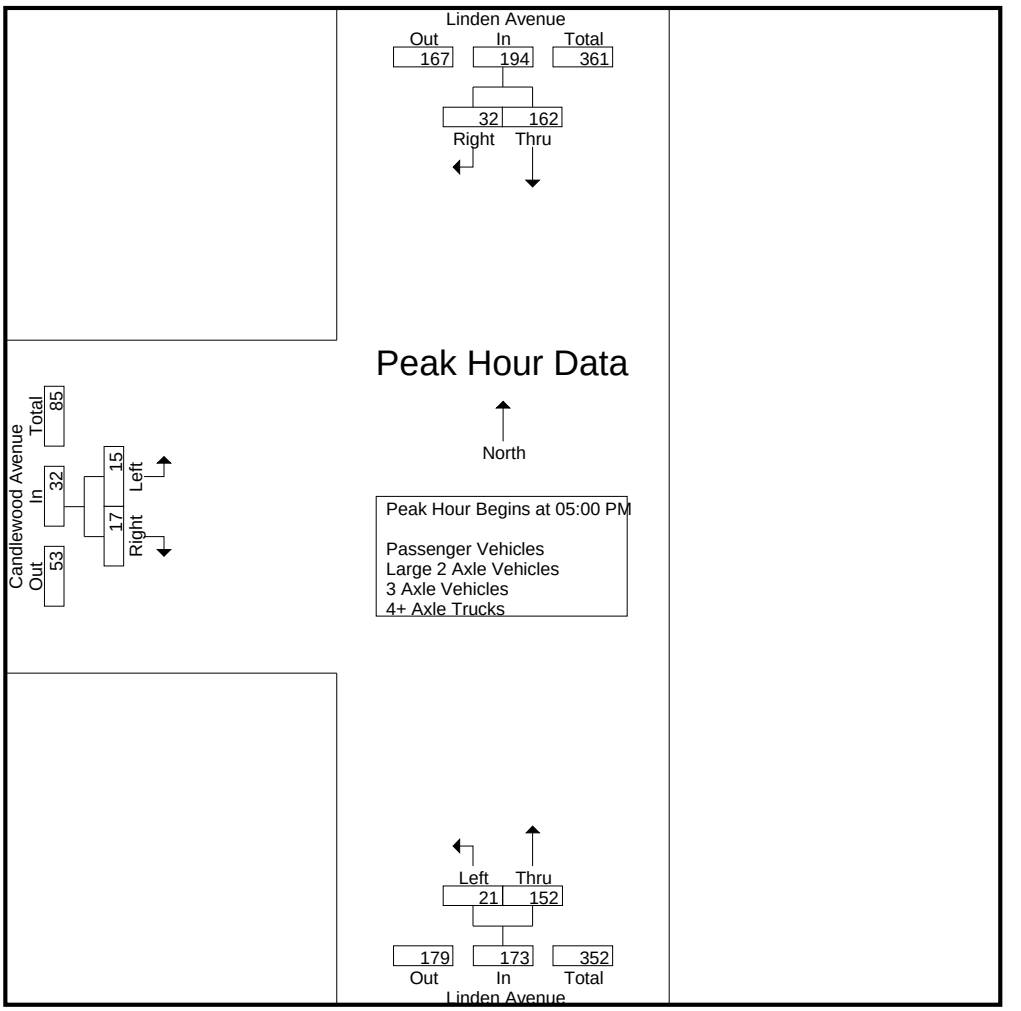
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	26	7	33	5	35	40	5	4	9	82
04:15 PM	34	9	43	3	31	34	2	6	8	85
04:30 PM	35	8	43	8	38	46	4	5	9	98
04:45 PM	30	3	33	8	31	39	2	7	9	81
Total	125	27	152	24	135	159	13	22	35	346
05:00 PM	43	8	51	7	43	50	5	6	11	112
05:15 PM	30	8	38	4	35	39	4	4	8	85
05:30 PM	45	4	49	5	39	44	3	4	7	100
05:45 PM	44	12	56	5	35	40	3	3	6	102
Total	162	32	194	21	152	173	15	17	32	399
Grand Total	287	59	346	45	287	332	28	39	67	745
Apprch %	82.9	17.1		13.6	86.4		41.8	58.2		
Total %	38.5	7.9	46.4	6	38.5	44.6	3.8	5.2	9	
Passenger Vehicles	287	56	343	44	282	326	28	39	67	736
% Passenger Vehicles	100	94.9	99.1	97.8	98.3	98.2	100	100	100	98.8
Large 2 Axle Vehicles	0	3	3	1	5	6	0	0	0	9
% Large 2 Axle Vehicles	0	5.1	0.9	2.2	1.7	1.8	0	0	0	1.2
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	43	8	51	**7**	**43**	**50**	**5**	**6**	**11**	**112**
05:15 PM	30	8	38	4	35	39	4	4	8	85
05:30 PM	**45**	4	49	5	39	44	3	4	7	100
05:45 PM	44	**12**	**56**	5	35	40	3	3	6	102
Total Volume	162	32	194	21	152	173	15	17	32	399
% App. Total	83.5	16.5		12.1	87.9		46.9	53.1		
PHF	.900	.667	.866	.750	.884	.865	.750	.708	.727	.891

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			04:15 PM		
+0 mins.	43	8	51	**8**	38	46	2	6	8
+15 mins.	30	8	38	8	31	39	4	5	9
+30 mins.	**45**	4	49	7	**43**	**50**	2	**7**	9
+45 mins.	44	**12**	**56**	4	35	39	**5**	6	**11**
Total Volume	162	32	194	27	147	174	13	24	37
% App. Total	83.5	16.5		15.5	84.5		35.1	64.9	
PHF	.900	.667	.866	.844	.855	.870	.650	.857	.841

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles

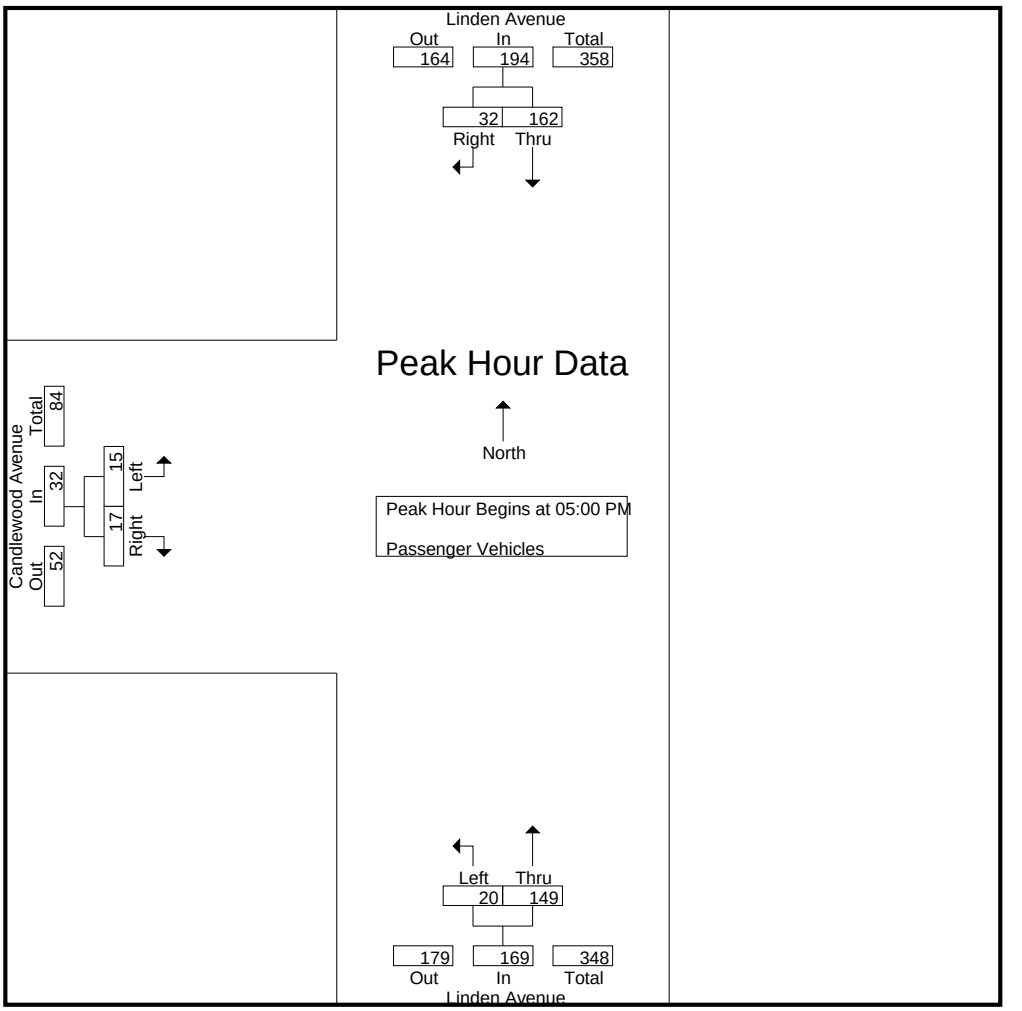
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	26	5	31	5	33	38	5	4	9	78
04:15 PM	34	9	43	3	31	34	2	6	8	85
04:30 PM	35	7	42	8	38	46	4	5	9	97
04:45 PM	30	3	33	8	31	39	2	7	9	81
Total	125	24	149	24	133	157	13	22	35	341
05:00 PM	43	8	51	7	41	48	5	6	11	110
05:15 PM	30	8	38	4	34	38	4	4	8	84
05:30 PM	45	4	49	5	39	44	3	4	7	100
05:45 PM	44	12	56	4	35	39	3	3	6	101
Total	162	32	194	20	149	169	15	17	32	395
Grand Total	287	56	343	44	282	326	28	39	67	736
Apprch %	83.7	16.3		13.5	86.5		41.8	58.2		
Total %	39	7.6	46.6	6	38.3	44.3	3.8	5.3	9.1	

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	43	8	51	**7**	**41**	**48**	**5**	**6**	**11**	**110**
05:15 PM	30	8	38	4	34	38	4	4	8	84
05:30 PM	**45**	4	49	5	39	44	3	4	7	100
05:45 PM	44	**12**	**56**	4	35	39	3	3	6	101
Total Volume	162	32	194	20	149	169	15	17	32	395
% App. Total	83.5	16.5		11.8	88.2		46.9	53.1		
PHF	.900	.667	.866	.714	.909	.880	.750	.708	.727	.898

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	43	8	51	**7**	**41**	**48**	**5**	**6**	**11**
+15 mins.	30	8	38	4	34	38	4	4	8
+30 mins.	**45**	4	49	5	39	44	3	4	7
+45 mins.	44	**12**	**56**	4	35	39	3	3	6
Total Volume	162	32	194	20	149	169	15	17	32
% App. Total	83.5	16.5		11.8	88.2		46.9	53.1	
PHF	.900	.667	.866	.714	.909	.880	.750	.708	.727

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Large 2 Axle Vehicles

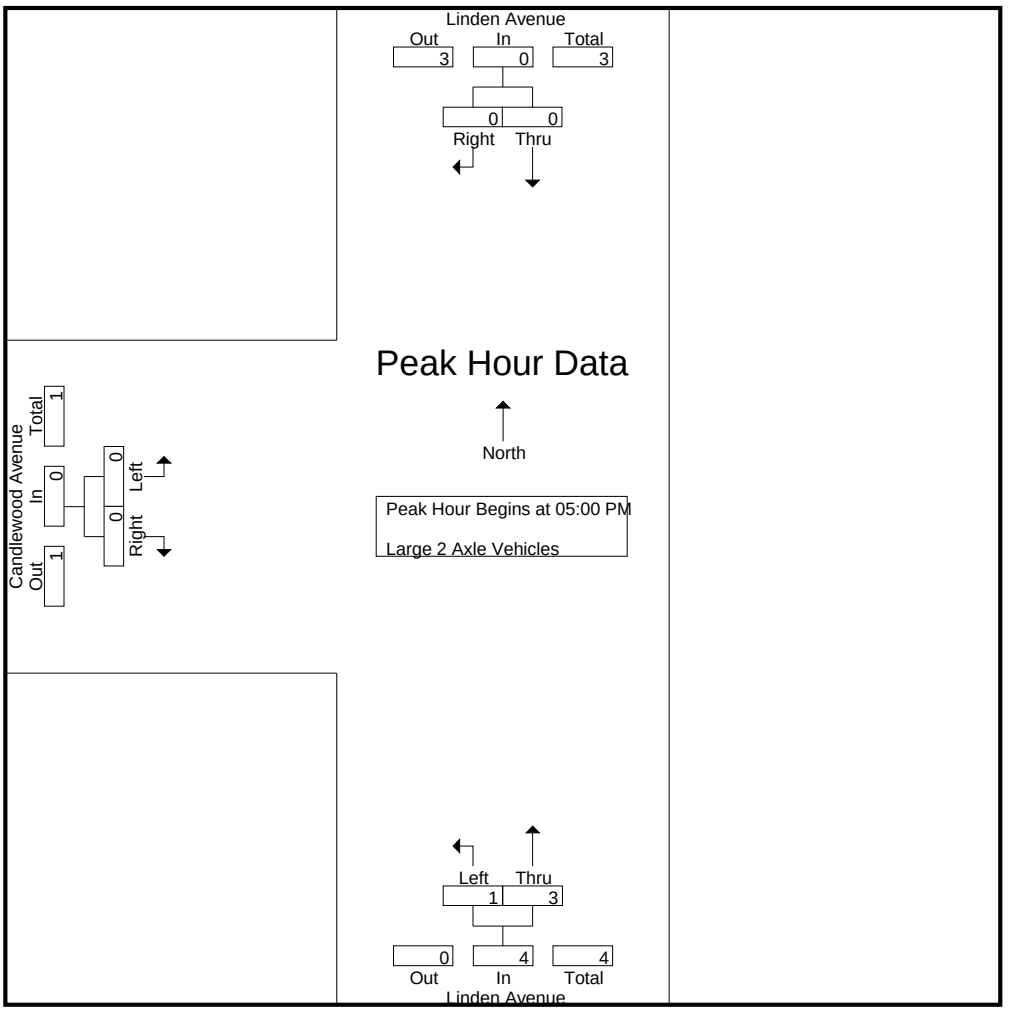
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	0	2	2	0	2	2	0	0	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	3	3	0	2	2	0	0	0	5
05:00 PM	0	0	0	0	2	2	0	0	0	2
05:15 PM	0	0	0	0	1	1	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	1	3	4	0	0	0	4
Grand Total	0	3	3	1	5	6	0	0	0	9
Apprch %	0	100		16.7	83.3		0	0		
Total %	0	33.3	33.3	11.1	55.6	66.7	0	0	0	

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	**2**	**2**	0	0	0	**2**
05:15 PM	0	0	0	0	1	1	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	**1**	0	1	0	0	0	1
Total Volume	0	0	0	1	3	4	0	0	0	4
% App. Total	0	0		25	75		0	0		
PHF	.000	.000	.000	.250	.375	.500	.000	.000	.000	.500

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City of Rialto
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E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	**2**	**2**	0	0	0
+15 mins.	0	0	0	0	1	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	**1**	0	1	0	0	0
Total Volume	0	0	0	1	3	4	0	0	0
% App. Total	0	0		25	75		0	0	
PHF	.000	.000	.000	.250	.375	.500	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 3 Axle Vehicles

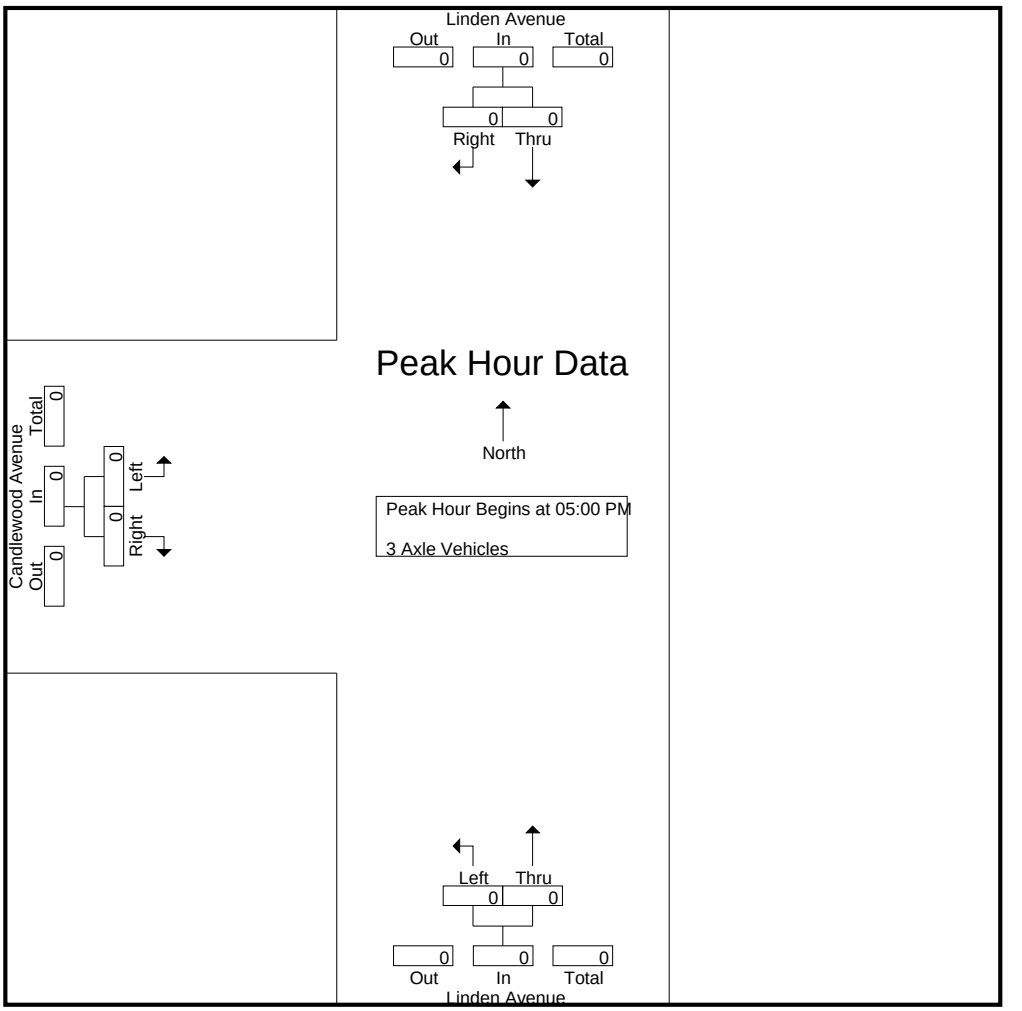
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 4+ Axle Trucks

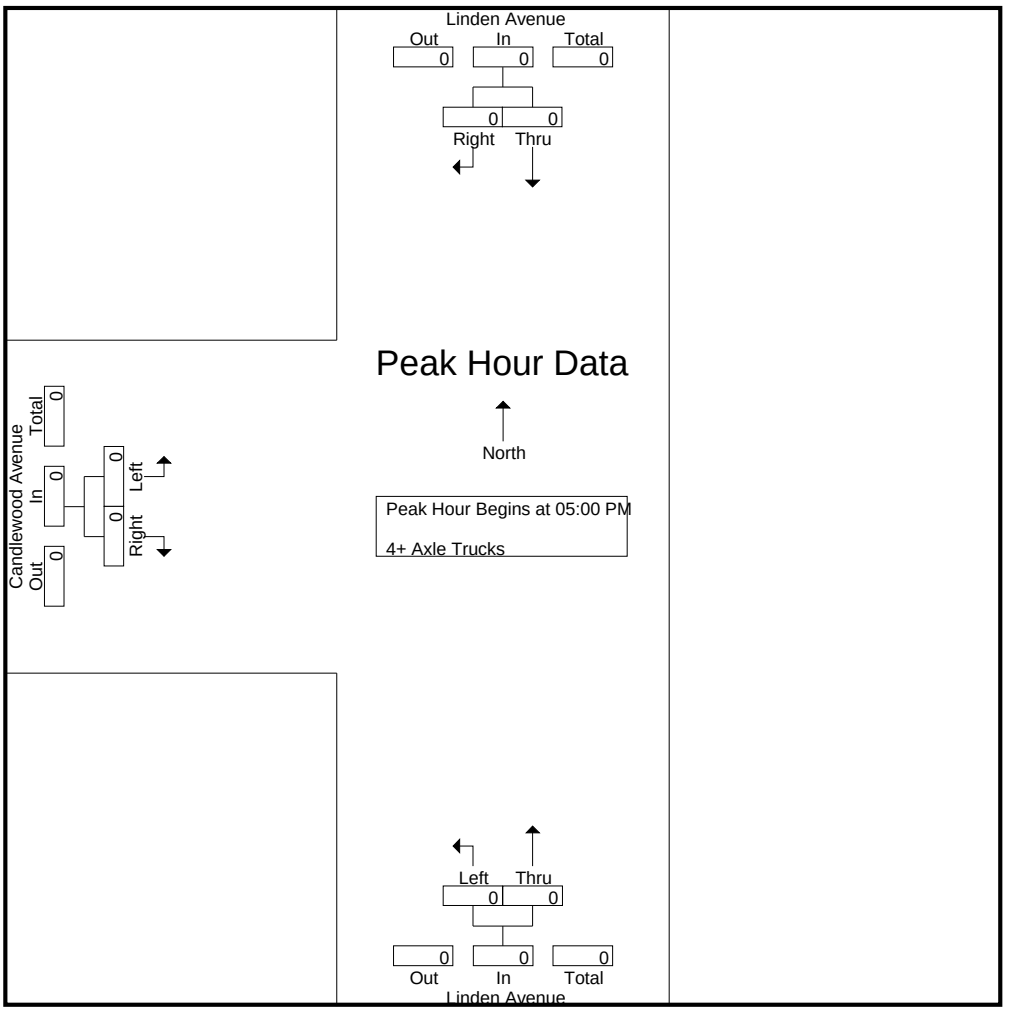
	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

	Linden Avenue Southbound			Linden Avenue Northbound			Candlewood Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue
Weather: Clear

File Name : 02_RLT_Lin_Can PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue

Date: 8/19/2025
Day: Tuesday

PEDESTRIANS

	North Leg Linden Avenue	East Leg Dead End	South Leg Linden Avenue	West Leg Candlewood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	1	0	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	2	0	0	0	2
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	3	0	0	0	3

	North Leg Linden Avenue	East Leg Dead End	South Leg Linden Avenue	West Leg Candlewood Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1

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Location: Rialto
N/S: Linden Avenue
E/W: Candlewood Avenue

Date: 8/19/2025
Day: Tuesday

BICYCLES

	Southbound Linden Avenue			Westbound Dead End			Northbound Linden Avenue			Eastbound Candlewood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	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
7:30 AM	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
8:00 AM	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
8:30 AM	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
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Linden Avenue			Westbound Dead End			Northbound Linden Avenue			Eastbound Candlewood Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	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
4:30 PM	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
5:00 PM	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
5:30 PM	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
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

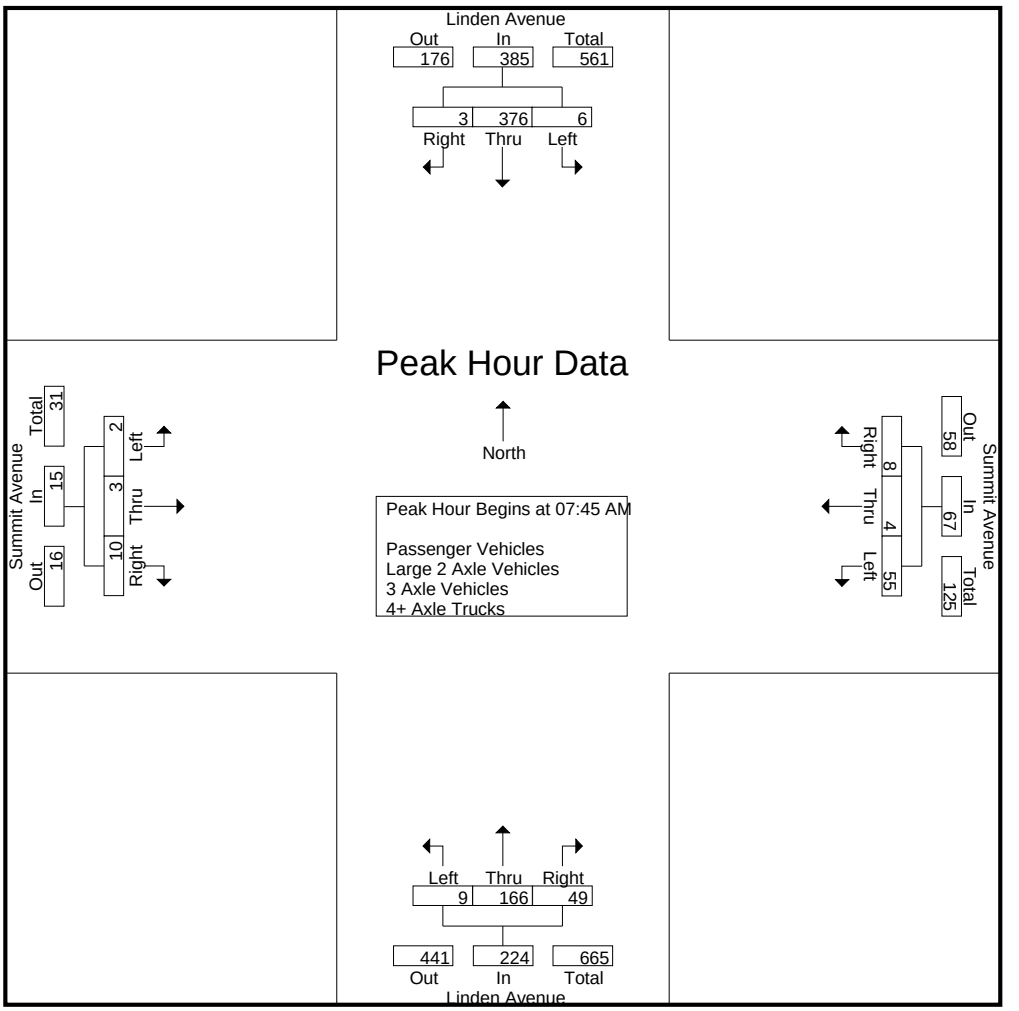
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	39	0	39	2	1	3	6	4	10	3	17	2	0	0	2	64
07:15 AM	0	62	1	63	6	0	0	6	2	23	5	30	1	1	6	8	107
07:30 AM	3	55	0	58	5	2	1	8	2	33	5	40	2	3	1	6	112
07:45 AM	1	71	0	72	5	3	5	13	2	18	5	25	0	0	2	2	112
Total	4	227	1	232	18	6	9	33	10	84	18	112	5	4	9	18	395
08:00 AM	1	96	0	97	9	0	0	9	2	33	8	43	0	2	2	4	153
08:15 AM	3	122	2	127	19	1	3	23	1	48	16	65	0	0	4	4	219
08:30 AM	1	87	1	89	22	0	0	22	4	67	20	91	2	1	2	5	207
08:45 AM	1	27	0	28	2	2	1	5	0	16	5	21	0	0	0	0	54
Total	6	332	3	341	52	3	4	59	7	164	49	220	2	3	8	13	633
Grand Total	10	559	4	573	70	9	13	92	17	248	67	332	7	7	17	31	1028
Apprch %	1.7	97.6	0.7		76.1	9.8	14.1		5.1	74.7	20.2		22.6	22.6	54.8		
Total %	1	54.4	0.4	55.7	6.8	0.9	1.3	8.9	1.7	24.1	6.5	32.3	0.7	0.7	1.7	3	
Passenger Vehicles	10	542	3	555	70	9	13	92	16	239	65	320	6	7	17	30	997
% Passenger Vehicles	100	97	75	96.9	100	100	100	100	94.1	96.4	97	96.4	85.7	100	100	96.8	97
Large 2 Axle Vehicles	0	16	1	17	0	0	0	0	1	8	2	11	1	0	0	1	29
% Large 2 Axle Vehicles	0	2.9	25	3	0	0	0	0	5.9	3.2	3	3.3	14.3	0	0	3.2	2.8
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% 4+ Axle Trucks	0	0.2	0	0.2	0	0	0	0	0	0.4	0	0.3	0	0	0	0	0.2

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	71	0	72	5	**3**	**5**	13	2	18	5	25	0	0	2	2	112
08:00 AM	1	96	0	97	9	0	0	9	2	33	8	43	0	**2**	2	4	153
08:15 AM	**3**	**122**	**2**	**127**	19	1	3	**23**	1	48	16	65	0	0	**4**	4	**219**
08:30 AM	1	87	1	89	**22**	0	0	22	**4**	**67**	**20**	**91**	**2**	1	2	**5**	207
Total Volume	6	376	3	385	55	4	8	67	9	166	49	224	2	3	10	15	691
% App. Total	1.6	97.7	0.8		82.1	6	11.9		4	74.1	21.9		13.3	20	66.7		
PHF	.500	.770	.375	.758	.625	.333	.400	.728	.563	.619	.613	.615	.250	.375	.625	.750	.789

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:15 AM			
+0 mins.	1	71	0	72	5	**3**	**5**	13	2	18	5	25	1	1	**6**	**8**
+15 mins.	1	96	0	97	9	0	0	9	2	33	8	43	**2**	**3**	1	6
+30 mins.	**3**	**122**	**2**	**127**	19	1	3	**23**	1	48	16	65	0	0	2	2
+45 mins.	1	87	1	89	**22**	0	0	22	**4**	**67**	**20**	**91**	0	2	2	4
Total Volume	6	376	3	385	55	4	8	67	9	166	49	224	3	6	11	20
% App. Total	1.6	97.7	0.8		82.1	6	11.9		4	74.1	21.9		15	30	55	
PHF	.500	.770	.375	.758	.625	.333	.400	.728	.563	.619	.613	.615	.375	.500	.458	.625

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles

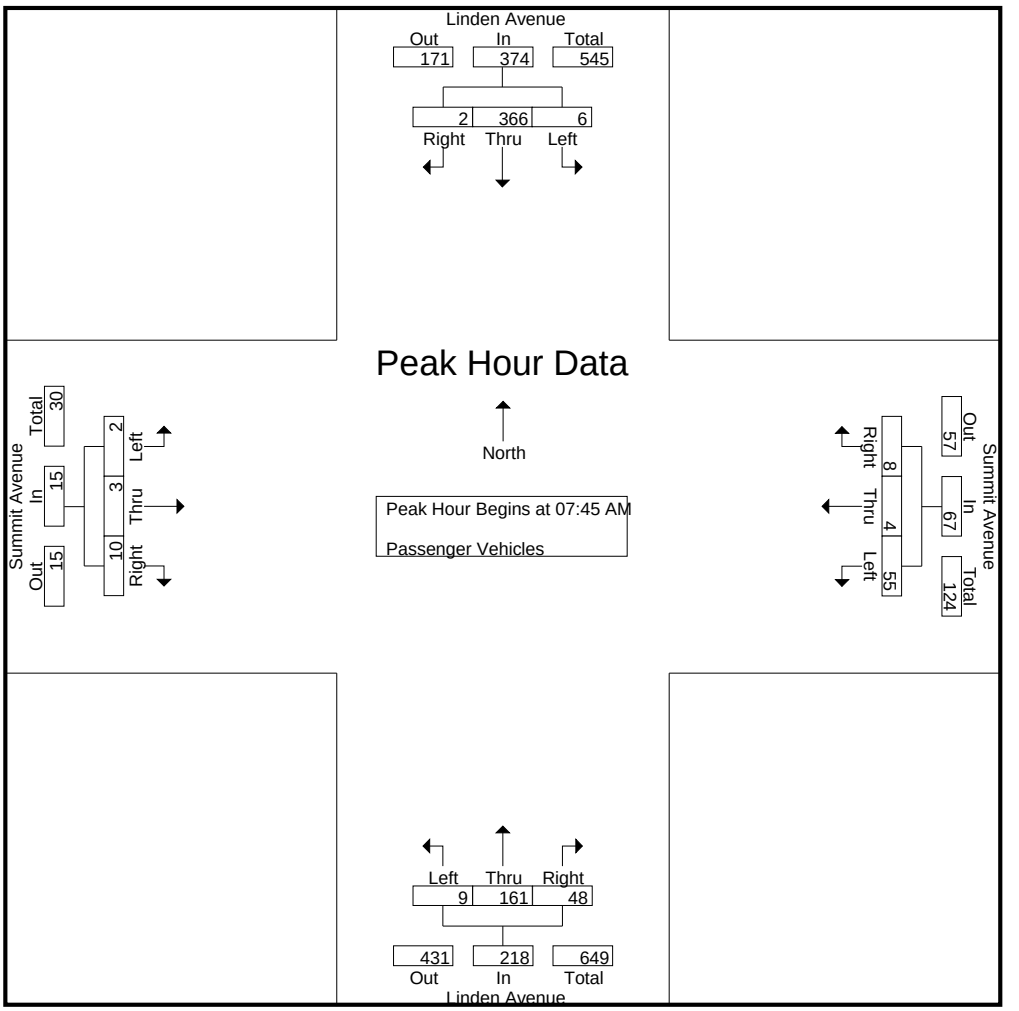
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	35	0	35	2	1	3	6	3	9	2	14	2	0	0	2	57
07:15 AM	0	60	1	61	6	0	0	6	2	22	5	29	1	1	6	8	104
07:30 AM	3	55	0	58	5	2	1	8	2	32	5	39	1	3	1	5	110
07:45 AM	1	68	0	69	5	3	5	13	2	18	5	25	0	0	2	2	109
Total	4	218	1	223	18	6	9	33	9	81	17	107	4	4	9	17	380
08:00 AM	1	94	0	95	9	0	0	9	2	31	8	41	0	2	2	4	149
08:15 AM	3	117	2	122	19	1	3	23	1	48	16	65	0	0	4	4	214
08:30 AM	1	87	0	88	22	0	0	22	4	64	19	87	2	1	2	5	202
08:45 AM	1	26	0	27	2	2	1	5	0	15	5	20	0	0	0	0	52
Total	6	324	2	332	52	3	4	59	7	158	48	213	2	3	8	13	617
Grand Total	10	542	3	555	70	9	13	92	16	239	65	320	6	7	17	30	997
Apprch %	1.8	97.7	0.5		76.1	9.8	14.1		5	74.7	20.3		20	23.3	56.7		
Total %	1	54.4	0.3	55.7	7	0.9	1.3	9.2	1.6	24	6.5	32.1	0.6	0.7	1.7	3	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	68	0	69	5	**3**	**5**	13	2	18	5	25	0	0	2	2	109
08:00 AM	1	94	0	95	9	0	0	9	2	31	8	41	0	**2**	2	4	149
08:15 AM	**3**	**117**	**2**	**122**	19	1	3	**23**	1	48	16	65	0	0	**4**	4	**214**
08:30 AM	1	87	0	88	**22**	0	0	22	**4**	**64**	**19**	**87**	**2**	1	2	**5**	202
Total Volume	6	366	2	374	55	4	8	67	9	161	48	218	2	3	10	15	674
% App. Total	1.6	97.9	0.5		82.1	6	11.9		4.1	73.9	22		13.3	20	66.7		
PHF	.500	.782	.250	.766	.625	.333	.400	.728	.563	.629	.632	.626	.250	.375	.625	.750	.787

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	1	68	0	69	5	**3**	**5**	13	2	18	5	25	0	0	2	2
+15 mins.	1	94	0	95	9	0	0	9	2	31	8	41	0	**2**	2	4
+30 mins.	**3**	**117**	**2**	**122**	19	1	3	**23**	1	48	16	65	0	0	**4**	4
+45 mins.	1	87	0	88	**22**	0	0	22	**4**	**64**	**19**	**87**	**2**	1	2	**5**
Total Volume	6	366	2	374	55	4	8	67	9	161	48	218	2	3	10	15
% App. Total	1.6	97.9	0.5		82.1	6	11.9		4.1	73.9	22		13.3	20	66.7	
PHF	.500	.782	.250	.766	.625	.333	.400	.728	.563	.629	.632	.626	.250	.375	.625	.750

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Large 2 Axle Vehicles

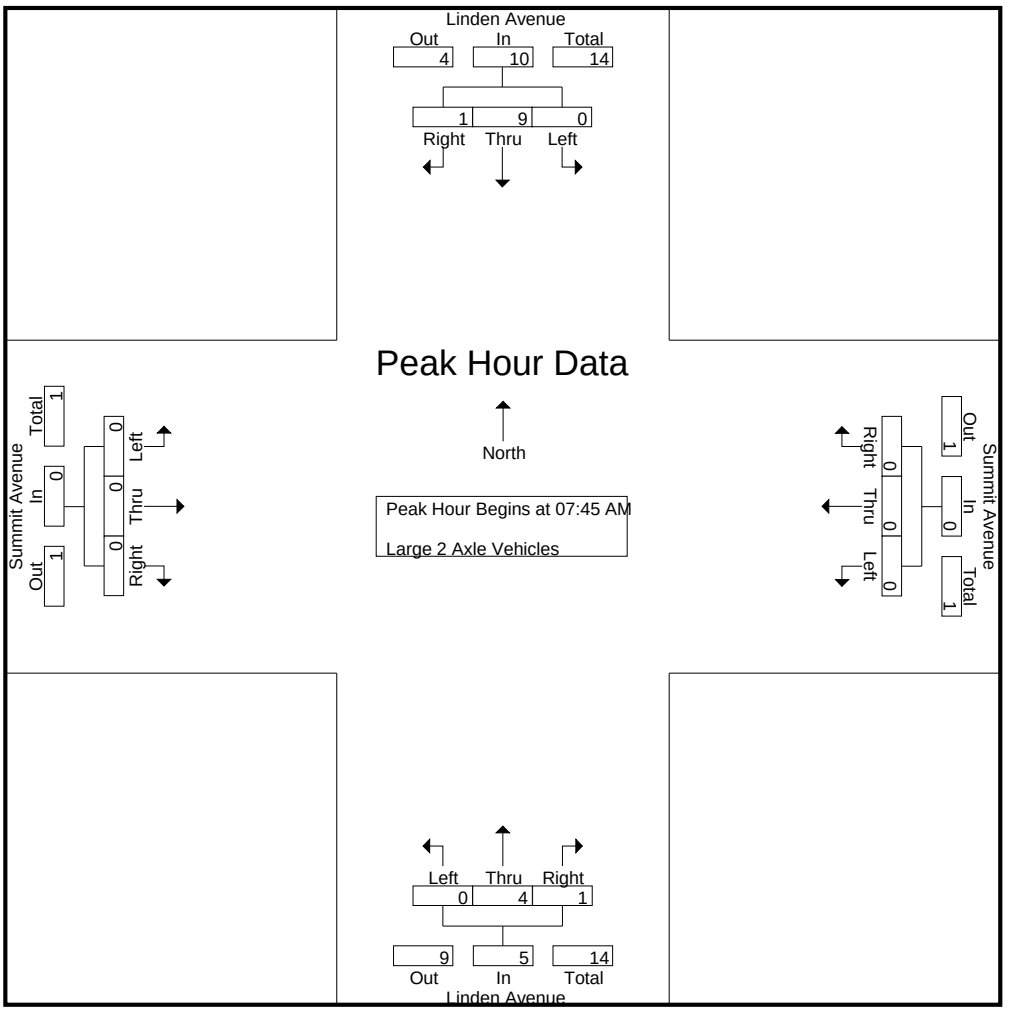
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	4	0	4	0	0	0	0	1	1	1	3	0	0	0	0	7
07:15 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
07:45 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	9	0	9	0	0	0	0	1	3	1	5	1	0	0	1	15
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
08:30 AM	0	0	1	1	0	0	0	0	0	3	1	4	0	0	0	0	5
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	7	1	8	0	0	0	0	0	5	1	6	0	0	0	0	14
Grand Total	0	16	1	17	0	0	0	0	1	8	2	11	1	0	0	1	29
Apprch %	0	94.1	5.9		0	0	0		9.1	72.7	18.2		100	0	0		
Total %	0	55.2	3.4	58.6	0	0	0	0	3.4	27.6	6.9	37.9	3.4	0	0	3.4	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	0	**5**	0	**5**	0	0	0	0	0	0	0	0	0	0	0	0	**5**
08:30 AM	0	0	**1**	1	0	0	0	0	0	**3**	**1**	**4**	0	0	0	0	5
Total Volume	0	9	1	10	0	0	0	0	0	4	1	5	0	0	0	0	15
% App. Total	0	90	10		0	0	0		0	80	20		0	0	0		
PHF	.000	.450	.250	.500	.000	.000	.000	.000	.000	.333	.250	.313	.000	.000	.000	.000	.750

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	**5**	0	**5**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	**1**	1	0	0	0	0	0	**3**	**1**	**4**	0	0	0	0
Total Volume	0	9	1	10	0	0	0	0	0	4	1	5	0	0	0	0
% App. Total	0	90	10		0	0	0		0	80	20		0	0	0	
PHF	.000	.450	.250	.500	.000	.000	.000	.000	.000	.333	.250	.313	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 3 Axle Vehicles

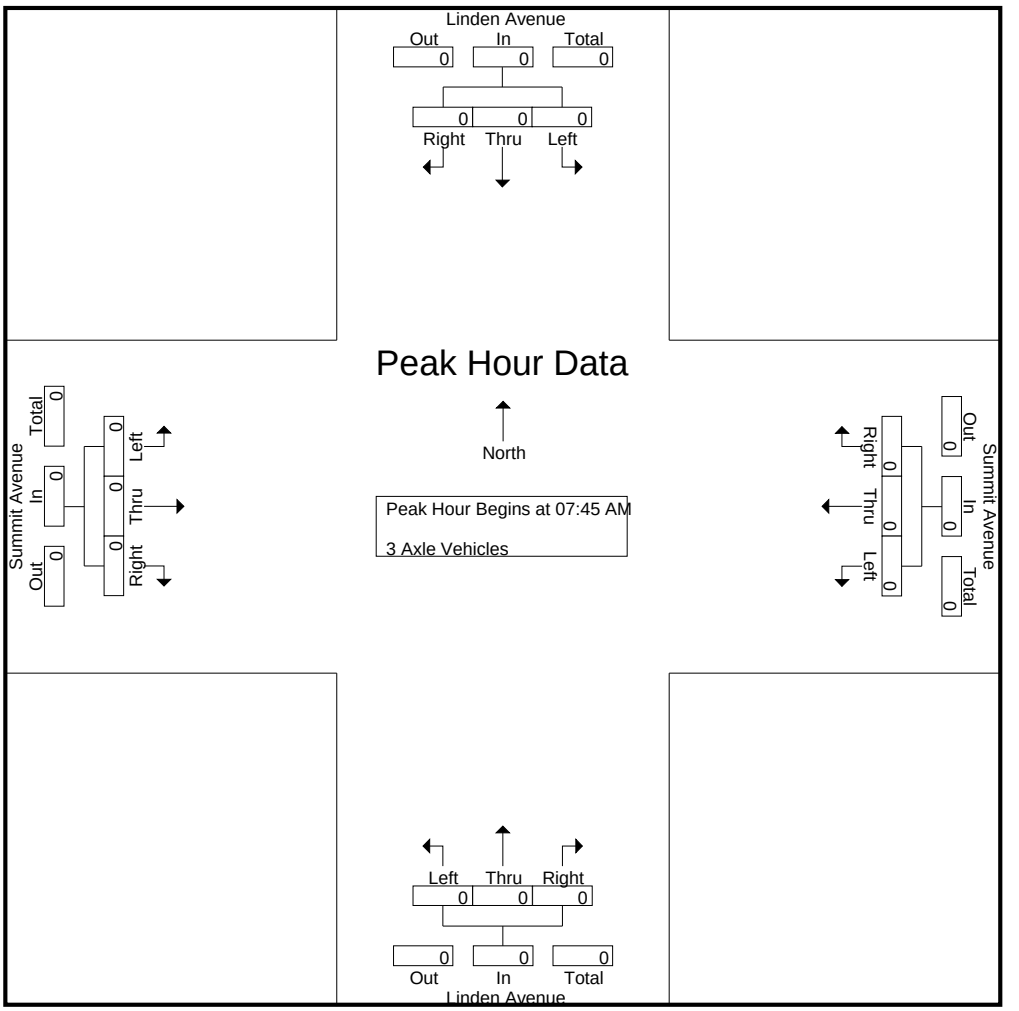
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 4+ Axle Trucks

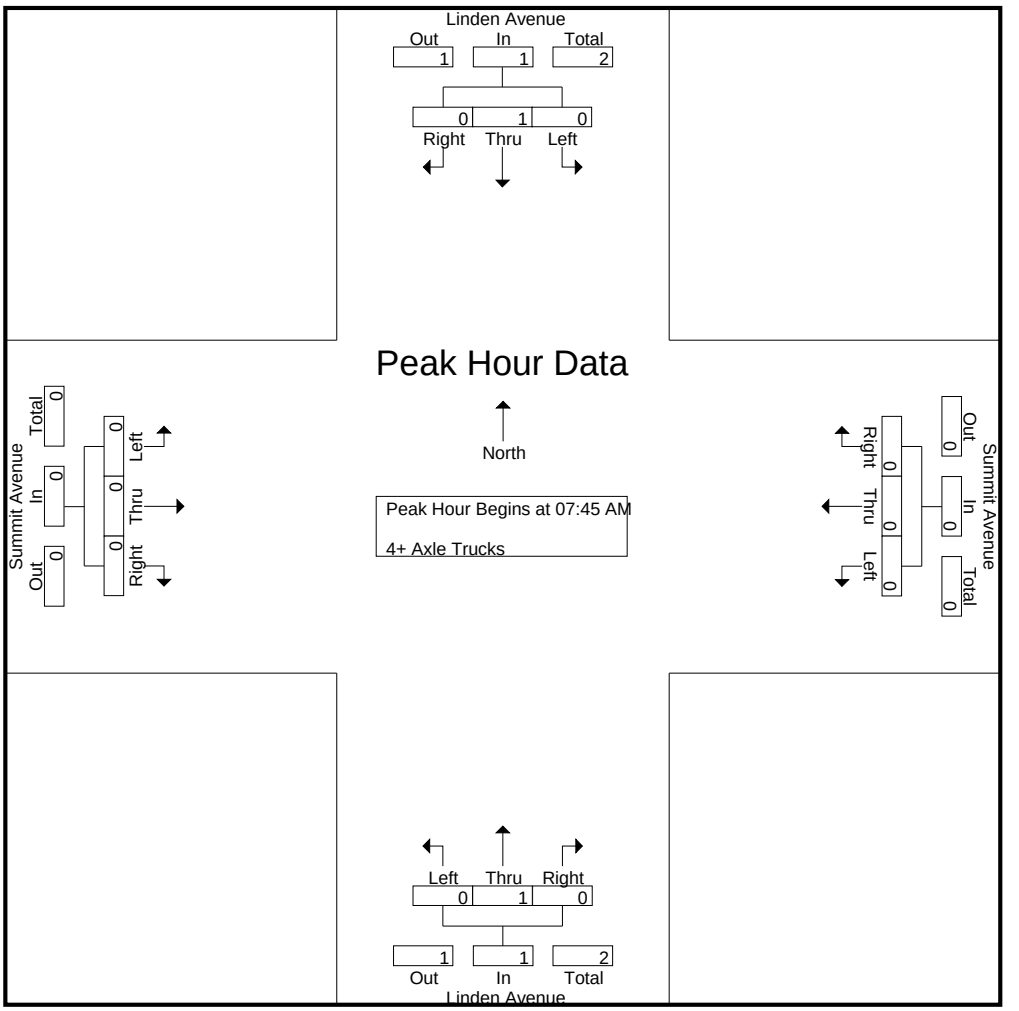
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	50	0	50	0	0	0	0	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**2**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum AM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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City of Rialto
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Weather: Clear

File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

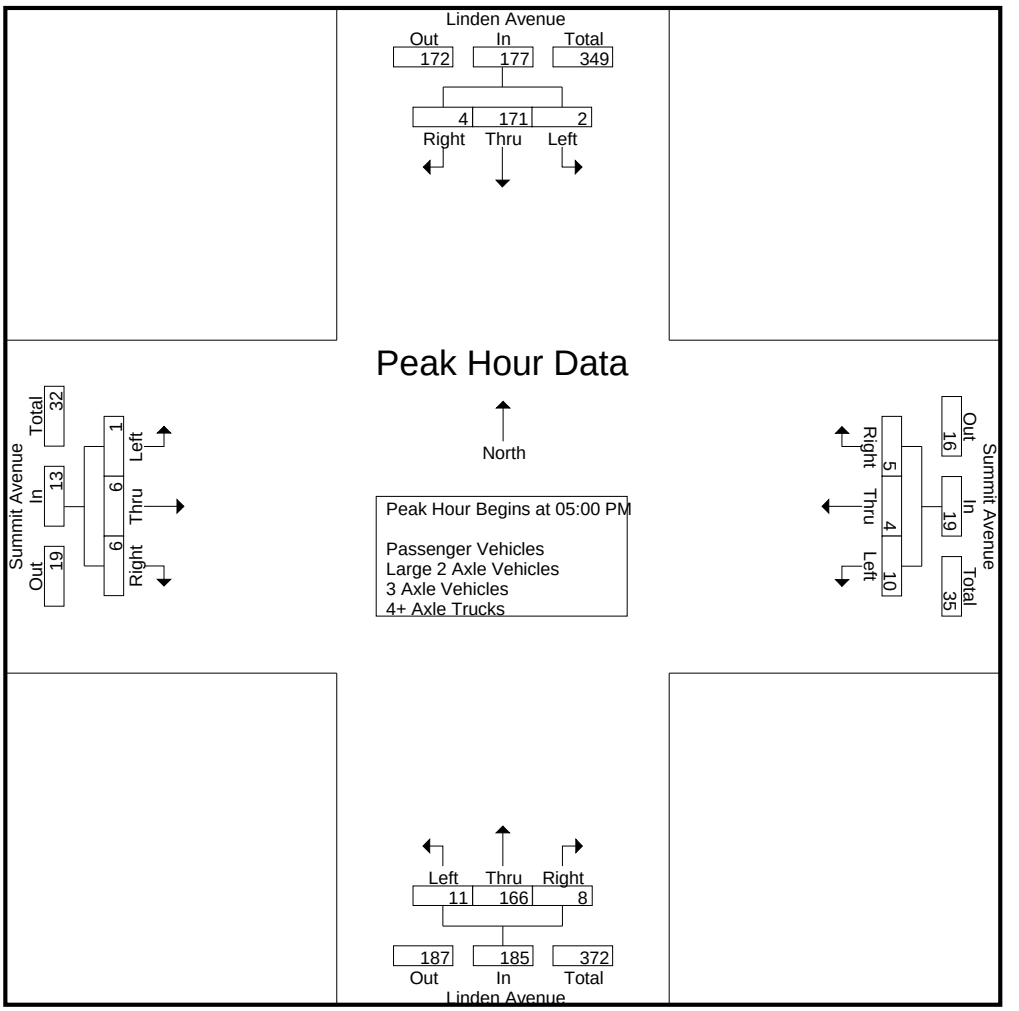
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	28	0	30	5	1	1	7	1	37	4	42	0	0	4	4	83
04:15 PM	0	38	1	39	4	1	0	5	4	37	1	42	0	1	5	6	92
04:30 PM	0	39	0	39	1	2	4	7	1	40	1	42	0	0	1	1	89
04:45 PM	1	36	0	37	3	0	2	5	2	38	4	44	0	4	1	5	91
Total	3	141	1	145	13	4	7	24	8	152	10	170	0	5	11	16	355
05:00 PM	1	47	2	50	2	2	1	5	2	46	1	49	0	1	0	1	105
05:15 PM	0	29	2	31	1	0	1	2	1	40	0	41	0	3	3	6	80
05:30 PM	0	48	0	48	3	1	2	6	6	40	5	51	0	0	2	2	107
05:45 PM	1	47	0	48	4	1	1	6	2	40	2	44	1	2	1	4	102
Total	2	171	4	177	10	4	5	19	11	166	8	185	1	6	6	13	394
Grand Total	5	312	5	322	23	8	12	43	19	318	18	355	1	11	17	29	749
Apprch %	1.6	96.9	1.6		53.5	18.6	27.9		5.4	89.6	5.1		3.4	37.9	58.6		
Total %	0.7	41.7	0.7	43	3.1	1.1	1.6	5.7	2.5	42.5	2.4	47.4	0.1	1.5	2.3	3.9	
Passenger Vehicles	5	307	5	317	23	8	12	43	19	310	18	347	1	11	17	29	736
% Passenger Vehicles	100	98.4	100	98.4	100	100	100	100	100	97.5	100	97.7	100	100	100	100	98.3
Large 2 Axle Vehicles	0	5	0	5	0	0	0	0	0	6	0	6	0	0	0	0	11
% Large 2 Axle Vehicles	0	1.6	0	1.6	0	0	0	0	0	1.9	0	1.7	0	0	0	0	1.5
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0.6	0	0.6	0	0	0	0	0.3
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**1**	47	**2**	**50**	2	**2**	1	5	2	**46**	1	49	0	1	0	1	105
05:15 PM	0	29	2	31	1	0	1	2	1	40	0	41	0	**3**	**3**	**6**	80
05:30 PM	0	**48**	0	48	3	1	**2**	**6**	**6**	40	**5**	**51**	0	0	2	2	**107**
05:45 PM	1	47	0	48	**4**	1	1	6	2	40	2	44	**1**	2	1	4	102
Total Volume	2	171	4	177	10	4	5	19	11	166	8	185	1	6	6	13	394
% App. Total	1.1	96.6	2.3		52.6	21.1	26.3		5.9	89.7	4.3		7.7	46.2	46.2		
PHF	.500	.891	.500	.885	.625	.500	.625	.792	.458	.902	.400	.907	.250	.500	.500	.542	.921

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File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	**1**	47	**2**	**50**	**5**	1	1	**7**	2	38	4	44	0	0	4	4
+15 mins.	0	29	2	31	4	1	0	5	2	**46**	1	49	0	1	**5**	**6**
+30 mins.	0	**48**	0	48	1	**2**	**4**	7	1	40	0	41	0	0	1	1
+45 mins.	1	47	0	48	3	0	2	5	**6**	40	**5**	**51**	0	**4**	1	5
Total Volume	2	171	4	177	13	4	7	24	11	164	10	185	0	5	11	16
% App. Total	1.1	96.6	2.3		54.2	16.7	29.2		5.9	88.6	5.4		0	31.2	68.8	
PHF	.500	.891	.500	.885	.650	.500	.438	.857	.458	.891	.500	.907	.000	.313	.550	.667

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City of Rialto
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File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Passenger Vehicles

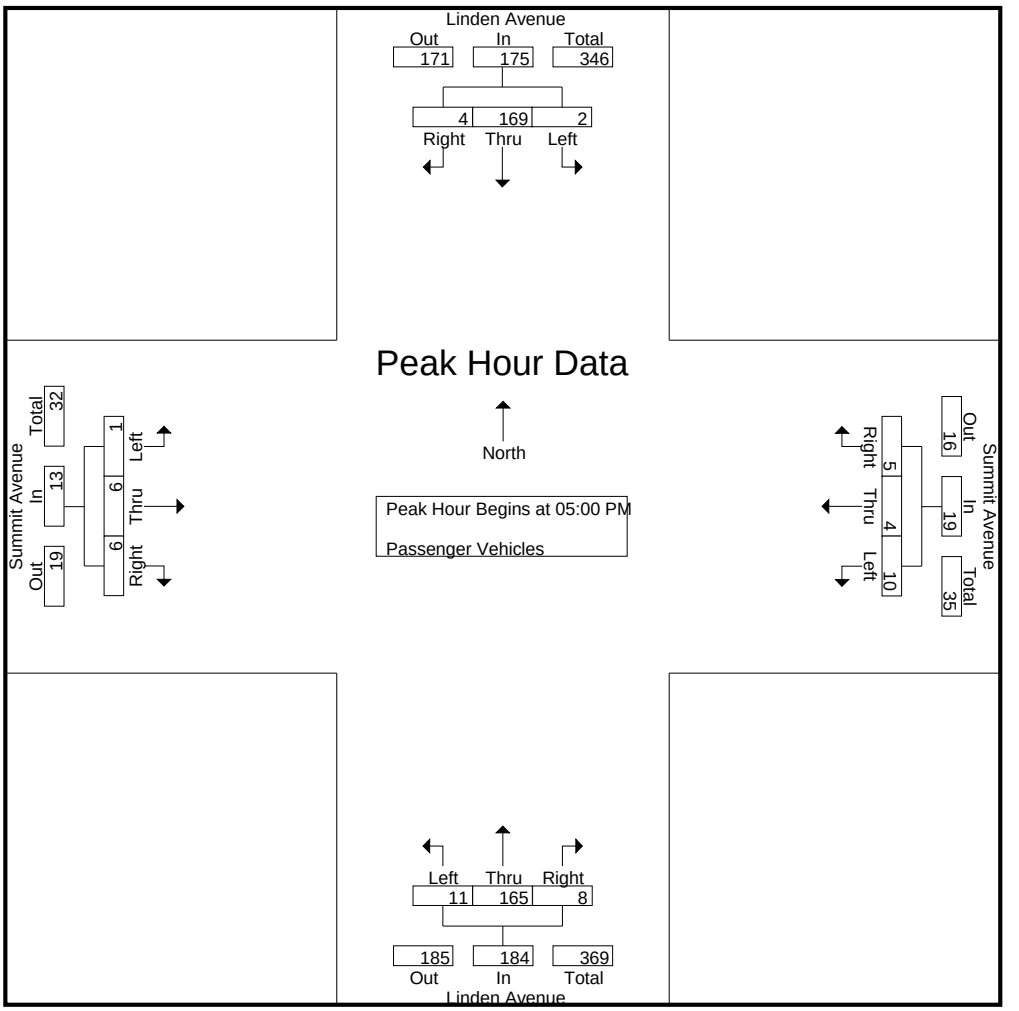
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	26	0	28	5	1	1	7	1	34	4	39	0	0	4	4	78
04:15 PM	0	38	1	39	4	1	0	5	4	36	1	41	0	1	5	6	91
04:30 PM	0	38	0	38	1	2	4	7	1	38	1	40	0	0	1	1	86
04:45 PM	1	36	0	37	3	0	2	5	2	37	4	43	0	4	1	5	90
Total	3	138	1	142	13	4	7	24	8	145	10	163	0	5	11	16	345
05:00 PM	1	46	2	49	2	2	1	5	2	45	1	48	0	1	0	1	103
05:15 PM	0	29	2	31	1	0	1	2	1	40	0	41	0	3	3	6	80
05:30 PM	0	47	0	47	3	1	2	6	6	40	5	51	0	0	2	2	106
05:45 PM	1	47	0	48	4	1	1	6	2	40	2	44	1	2	1	4	102
Total	2	169	4	175	10	4	5	19	11	165	8	184	1	6	6	13	391
Grand Total	5	307	5	317	23	8	12	43	19	310	18	347	1	11	17	29	736
Apprch %	1.6	96.8	1.6		53.5	18.6	27.9		5.5	89.3	5.2		3.4	37.9	58.6		
Total %	0.7	41.7	0.7	43.1	3.1	1.1	1.6	5.8	2.6	42.1	2.4	47.1	0.1	1.5	2.3	3.9	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**1**	46	**2**	**49**	2	**2**	1	5	2	**45**	1	48	0	1	0	1	103
05:15 PM	0	29	2	31	1	0	1	2	1	40	0	41	0	**3**	**3**	**6**	80
05:30 PM	0	**47**	0	47	3	1	**2**	**6**	**6**	40	**5**	**51**	0	0	2	2	**106**
05:45 PM	1	47	0	48	**4**	1	1	6	2	40	2	44	**1**	2	1	4	102
Total Volume	2	169	4	175	10	4	5	19	11	165	8	184	1	6	6	13	391
% App. Total	1.1	96.6	2.3		52.6	21.1	26.3		6	89.7	4.3		7.7	46.2	46.2		
PHF	.500	.899	.500	.893	.625	.500	.625	.792	.458	.917	.400	.902	.250	.500	.500	.542	.922

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Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**1**	46	**2**	**49**	2	**2**	1	5	2	**45**	1	48	0	1	0	1
+15 mins.	0	29	2	31	1	0	1	2	1	40	0	41	0	**3**	**3**	**6**
+30 mins.	0	**47**	0	47	3	1	**2**	**6**	**6**	40	**5**	**51**	0	0	2	2
+45 mins.	1	47	0	48	**4**	1	1	6	2	40	2	44	**1**	2	1	4
Total Volume	2	169	4	175	10	4	5	19	11	165	8	184	1	6	6	13
% App. Total	1.1	96.6	2.3		52.6	21.1	26.3		6	89.7	4.3		7.7	46.2	46.2	
PHF	.500	.899	.500	.893	.625	.500	.625	.792	.458	.917	.400	.902	.250	.500	.500	.542

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City of Rialto
N/S: Linden Avenue
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File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- Large 2 Axle Vehicles

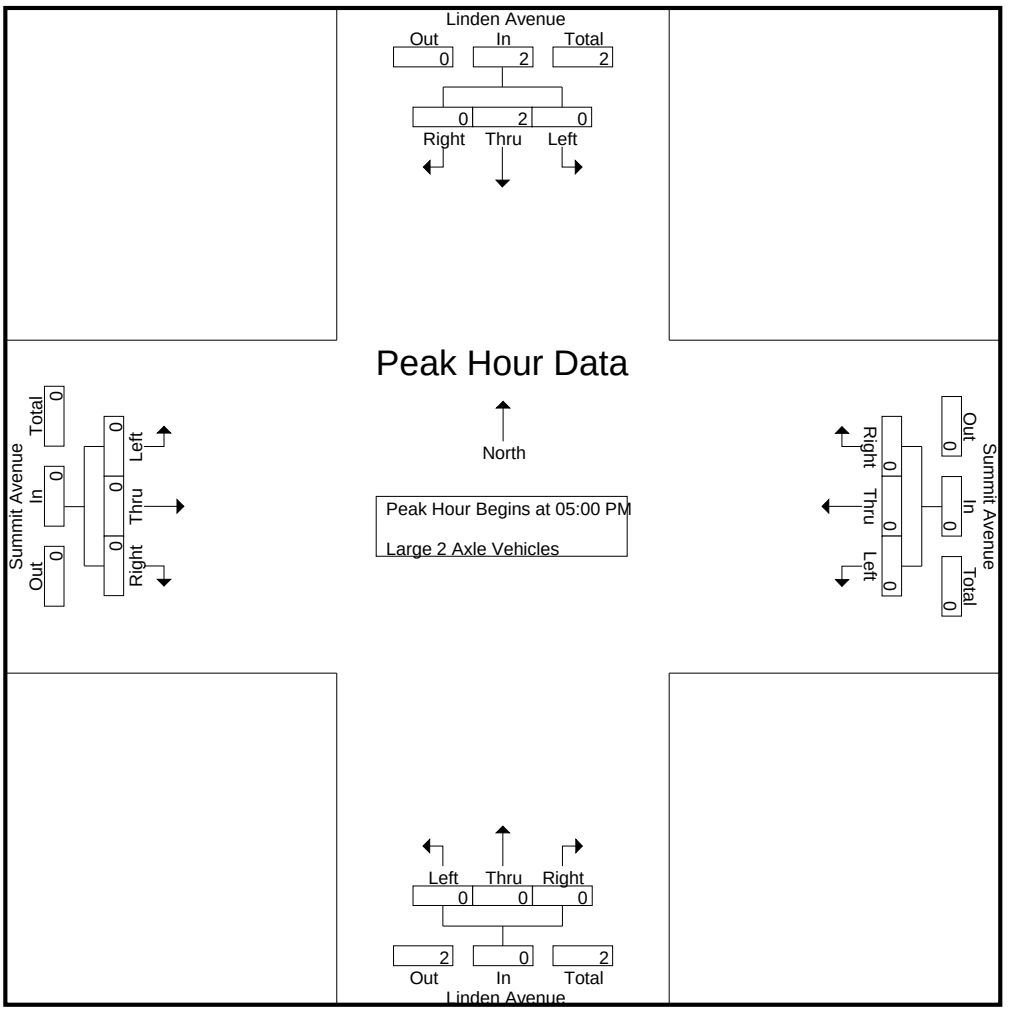
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	6	0	6	0	0	0	0	9
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	5	0	5	0	0	0	0	0	6	0	6	0	0	0	0	11
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	45.5	0	45.5	0	0	0	0	0	54.5	0	54.5	0	0	0	0	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500

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File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
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File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 3 Axle Vehicles

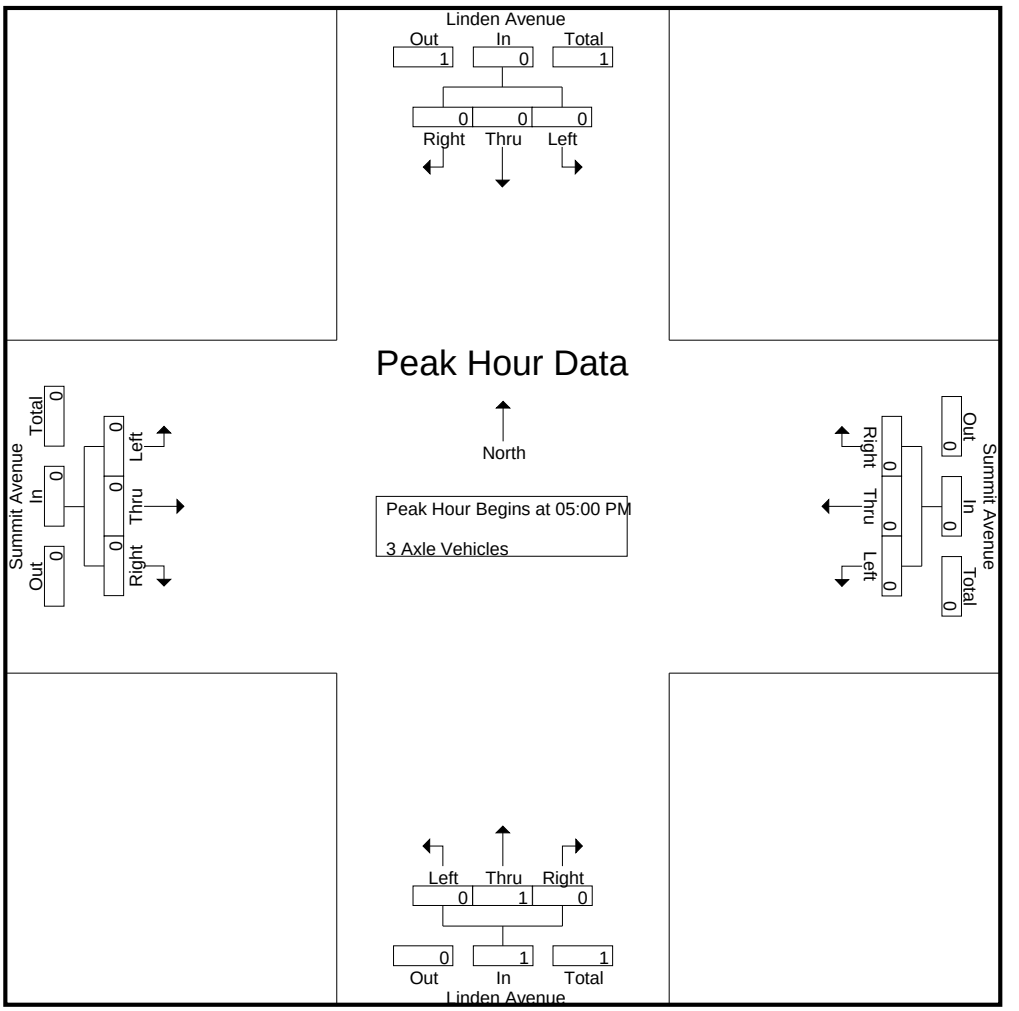
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

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File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
E/W: Summit Avenue
Weather: Clear

File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 1

Groups Printed- 4+ Axle Trucks

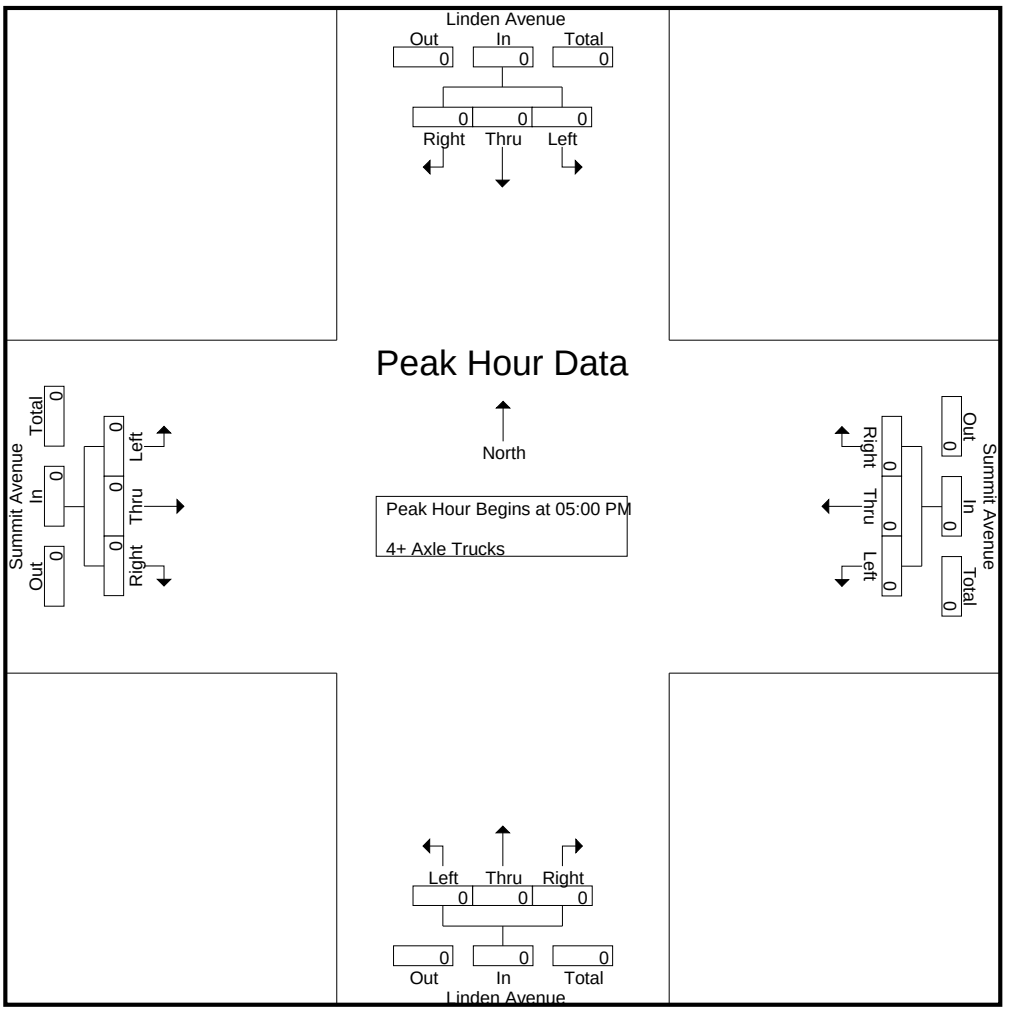
	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

	Linden Avenue Southbound				Summit Avenue Westbound				Linden Avenue Northbound				Summit Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Rialto
N/S: Linden Avenue
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Weather: Clear

File Name : 03_RLT_Lin_Sum PM
Site Code : 22525786
Start Date : 8/19/2025
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Rialto
N/S: Linden Avenue
E/W: Summit Avenue

Date: 8/19/2025
Day: Tuesday

PEDESTRIANS

	North Leg Linden Avenue	East Leg Summit Avenue	South Leg Linden Avenue	West Leg Summit Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	0	0	0	2	2
7:30 AM	0	1	0	2	3
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	1	1	3	5
8:30 AM	1	1	0	0	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	3	2	8	14

	North Leg Linden Avenue	East Leg Summit Avenue	South Leg Linden Avenue	West Leg Summit Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	1	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	2	1	3
5:15 PM	0	0	3	0	3
5:30 PM	0	0	3	0	3
5:45 PM	0	0	5	0	5
TOTAL VOLUMES:	0	0	13	2	15

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Location: Rialto
N/S: Linden Avenue
E/W: Summit Avenue

Date: 8/19/2025
Day: Tuesday

BICYCLES

	Southbound Linden Avenue			Westbound Summit Avenue			Northbound Linden Avenue			Eastbound Summit Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	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
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00 AM	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
8:30 AM	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
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	1	0	0	0	3

	Southbound Linden Avenue			Westbound Summit Avenue			Northbound Linden Avenue			Eastbound Summit Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00 PM	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
5:30 PM	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
TOTAL VOLUMES:	0	0	0	0	0	0	1	0	1	0	0	0	2

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City of Rialto
Linden Avenue
N/ Candlewood Avenue
24 Hour Directional Classification Count

RLT001
Site Code: 225-25786

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/19/25	0	18	1	0	0	0	0	0	0	0	0	0	0	19
01:00	0	34	0	0	0	0	0	0	0	0	0	0	0	34
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	27	1	0	0	0	0	0	0	0	0	0	0	28
04:00	0	96	0	0	0	0	0	0	0	0	0	0	0	96
05:00	0	40	0	0	0	0	0	0	**1**	0	0	0	0	41
06:00	0	60	9	0	1	0	0	0	0	0	0	0	0	70
07:00	0	112	13	**4**	0	0	0	0	0	0	0	0	0	129
08:00	0	**166**	**17**	4	2	0	0	0	1	0	0	0	0	**190**
09:00	0	47	15	0	2	0	0	**1**	0	0	0	0	0	65
10:00	0	48	11	0	**3**	0	0	0	1	0	0	0	0	63
11:00	0	62	11	0	0	0	0	0	1	0	0	0	0	74
12 PM	0	58	12	0	**3**	**2**	0	**1**	0	0	0	0	0	76
13:00	0	90	16	0	2	0	0	0	0	0	0	0	0	108
14:00	0	85	16	2	1	0	0	0	0	0	0	0	0	104
15:00	0	**269**	25	**4**	1	0	0	0	0	0	0	0	0	**299**
16:00	0	117	**26**	3	1	1	0	0	0	0	0	0	0	148
17:00	0	144	20	0	2	1	0	0	0	0	0	0	0	167
18:00	0	110	23	0	1	0	0	1	0	0	0	0	0	135
19:00	**1**	88	13	0	0	0	0	0	0	0	0	0	0	102
20:00	0	69	4	0	2	0	0	0	0	0	0	0	0	75
21:00	0	56	2	0	0	0	0	0	0	0	0	0	0	58
22:00	0	32	5	0	0	0	0	0	0	0	0	0	0	37
23:00	0	17	2	0	0	0	0	0	0	0	0	0	0	19
Total	1	1851	242	17	21	4	0	3	4	0	0	0	0	2143
Percent	0.0%	86.4%	11.3%	0.8%	1.0%	0.2%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	07:00	10:00			09:00	05:00					08:00
Vol.		166	17	4	3			1	1					190
PM Peak	19:00	15:00	16:00	15:00	12:00	12:00		12:00						15:00
Vol.	1	269	26	4	3	2		1						299
Grand Total	1	1851	242	17	21	4	0	3	4	0	0	0	0	2143
Percent	0.0%	86.4%	11.3%	0.8%	1.0%	0.2%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	

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City of Rialto
Linden Avenue
N/ Candlewood Avenue
24 Hour Directional Classification Count

RLT001
Site Code: 225-25786

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/19/25	0	19	1	0	0	0	0	0	0	0	0	0	0	20
01:00	0	22	0	0	0	0	0	0	0	**1**	0	0	0	23
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
04:00	0	35	0	0	0	0	0	0	0	0	0	0	0	35
05:00	0	66	0	1	0	0	0	0	0	0	0	0	0	67
06:00	0	110	19	0	2	0	0	0	0	0	0	0	0	131
07:00	0	192	23	**7**	2	0	0	0	0	0	0	0	0	224
08:00	0	**294**	**48**	5	0	0	0	**1**	0	0	0	0	0	**348**
09:00	**1**	57	16	1	1	0	0	0	0	0	0	0	0	76
10:00	0	43	19	2	**3**	0	0	0	**1**	0	0	0	0	68
11:00	0	64	13	3	3	0	0	0	0	0	0	0	0	83
12 PM	0	66	12	1	0	**1**	0	0	**1**	0	0	0	0	81
13:00	0	69	20	2	2	0	0	0	0	0	0	0	0	93
14:00	0	110	13	**5**	2	0	0	0	0	0	0	0	0	130
15:00	0	**245**	**27**	3	1	0	0	0	0	0	0	0	0	**276**
16:00	**1**	133	12	4	**3**	0	0	0	0	0	0	0	0	153
17:00	0	176	18	0	0	0	0	0	0	0	0	0	0	194
18:00	1	115	17	3	2	0	0	0	0	0	0	0	0	138
19:00	0	67	7	1	0	0	0	0	0	0	0	0	0	75
20:00	1	59	3	1	0	0	0	0	0	0	0	0	0	64
21:00	1	47	2	1	0	0	0	0	0	0	0	0	0	51
22:00	0	28	4	0	0	0	0	0	0	0	0	0	0	32
23:00	0	22	2	0	0	0	0	0	0	0	0	0	0	24
Total	5	2065	276	40	21	1	0	1	2	1	0	0	0	2412
Percent	0.2%	85.6%	11.4%	1.7%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00	07:00	10:00			08:00	10:00	01:00				08:00
Vol.	1	294	48	7	3			1	1	1				348
PM Peak	16:00	15:00	15:00	14:00	16:00	12:00			12:00					15:00
Vol.	1	245	27	5	3	1			1					276
Grand Total	5	2065	276	40	21	1	0	1	2	1	0	0	0	2412
Percent	0.2%	85.6%	11.4%	1.7%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	

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City of Rialto
Linden Avenue
N/ Candlewood Avenue
24 Hour Directional Classification Count

RLT001
Site Code: 225-25786

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/19/25	0	37	2	0	0	0	0	0	0	0	0	0	0	39
01:00	0	56	0	0	0	0	0	0	0	**1**	0	0	0	57
02:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
03:00	0	49	1	0	0	0	0	0	0	0	0	0	0	50
04:00	0	131	0	0	0	0	0	0	0	0	0	0	0	131
05:00	0	106	0	1	0	0	0	0	1	0	0	0	0	108
06:00	0	170	28	0	3	0	0	0	0	0	0	0	0	201
07:00	0	304	36	**11**	2	0	0	0	0	0	0	0	0	353
08:00	0	**460**	**65**	9	2	0	0	**1**	1	0	0	0	0	**538**
09:00	**1**	104	31	1	3	0	0	1	0	0	0	0	0	141
10:00	0	91	30	2	**6**	0	0	0	**2**	0	0	0	0	131
11:00	0	126	24	3	3	0	0	0	1	0	0	0	0	157
12 PM	0	124	24	1	3	**3**	0	**1**	**1**	0	0	0	0	157
13:00	0	159	36	2	**4**	0	0	0	0	0	0	0	0	201
14:00	0	195	29	**7**	3	0	0	0	0	0	0	0	0	234
15:00	0	**514**	**52**	7	2	0	0	0	0	0	0	0	0	**575**
16:00	**1**	250	38	7	4	1	0	0	0	0	0	0	0	301
17:00	0	320	38	0	2	1	0	0	0	0	0	0	0	361
18:00	1	225	40	3	3	0	0	1	0	0	0	0	0	273
19:00	1	155	20	1	0	0	0	0	0	0	0	0	0	177
20:00	1	128	7	1	2	0	0	0	0	0	0	0	0	139
21:00	1	103	4	1	0	0	0	0	0	0	0	0	0	109
22:00	0	60	9	0	0	0	0	0	0	0	0	0	0	69
23:00	0	39	4	0	0	0	0	0	0	0	0	0	0	43
Total	6	3916	518	57	42	5	0	4	6	1	0	0	0	4555
Percent	0.1%	86.0%	11.4%	1.3%	0.9%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00	07:00	10:00			08:00	10:00	01:00				08:00
Vol.	1	460	65	11	6			1	2	1				538
PM Peak	16:00	15:00	15:00	14:00	13:00	12:00		12:00	12:00					15:00
Vol.	1	514	52	7	4	3		1	1					575
Grand Total	6	3916	518	57	42	5	0	4	6	1	0	0	0	4555
Percent	0.1%	86.0%	11.4%	1.3%	0.9%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

APPENDIX D

INTERSECTION LEVEL OF SERVICE WORKSHEETS

EXISTING

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	16.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.560

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	64	124	572	126	214	502
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	124	572	126	214	502
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	34	159	35	59	139
Total Analysis Volume [veh/h]	71	137	634	140	237	557
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	15	0	38	0	22	60
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	9	9	38	38	12	55
g / C, Green / Cycle	0.12	0.12	0.51	0.51	0.17	0.73
(v / s)_i Volume / Saturation Flow Rate	0.04	0.09	0.22	0.24	0.14	0.32
s, saturation flow rate [veh/h]	1614	1502	1729	1625	1680	1733
c, Capacity [veh/h]	187	174	874	821	280	1271
d1, Uniform Delay [s]	30.70	32.29	11.84	12.06	30.35	3.93
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.26	7.59	1.63	1.94	6.89	1.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.79	0.44	0.47	0.85	0.44
d, Delay for Lane Group [s/veh]	31.96	39.88	13.46	14.00	37.25	5.03
Lane Group LOS	C	D	B	B	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.20	2.68	3.75	3.86	4.35	2.01
50th-Percentile Queue Length [ft/ln]	30.11	66.97	93.72	96.47	108.73	50.36
95th-Percentile Queue Length [veh/ln]	2.17	4.82	6.75	6.95	7.77	3.63
95th-Percentile Queue Length [ft/ln]	54.19	120.54	168.69	173.64	194.24	90.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.96	39.88	13.67	14.00	37.25	5.03
Movement LOS	C	D	B	B	D	A
d_A, Approach Delay [s/veh]	37.18		13.73		14.65	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	16.89					
Intersection LOS	B					
Intersection V/C	0.560					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.34	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.152	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	847	1434
d_b, Bicycle Delay [s]	28.28	12.47	3.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.198	2.870
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.082

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	5	172	0	0	372	19	25	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.80	0.00	0.00	0.60	0.00	1.90	0.00	3.60	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	172	0	0	372	19	25	0	12	0	0	0
Peak Hour Factor	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403
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	51	0	0	111	6	7	0	4	0	0	0
Total Analysis Volume [veh/h]	6	205	0	0	443	23	30	0	14	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.08	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.26	0.00	0.00	7.61	0.00	0.00	15.79	15.54	11.98	14.95	14.68	9.28
Movement LOS	A	A	A	A	A	A	C	C	B	B	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.35	0.35	0.35	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.25	0.25	0.25	0.00	0.00	0.00	8.72	8.72	8.72	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.23			0.00			14.58			12.97		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	0.96											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	17.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	9	166	49	6	376	3	2	3	10	55	4	8
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 [%]	5.90	3.60	3.00	0.00	3.00	25.00	14.30	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]	9	166	49	6	376	3	2	3	10	55	4	8
Peak Hour Factor	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888
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	53	16	2	119	1	1	1	3	17	1	3
Total Analysis Volume [veh/h]	11	210	62	8	477	4	3	4	13	70	5	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.00	0.00	0.01	0.01	0.02	0.16	0.01	0.01
d_M, Delay for Movement [s/veh]	8.46	0.00	0.00	7.78	0.00	0.00	16.24	16.54	9.97	14.78	17.11	10.56
Movement LOS	A	A	A	A	A	A	C	C	A	B	C	B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.02	0.00	0.00	0.12	0.12	0.12	0.66	0.66	0.66
95th-Percentile Queue Length [ft/ln]	0.79	0.00	0.00	0.46	0.00	0.00	3.01	3.01	3.01	16.47	16.47	16.47
d_A, Approach Delay [s/veh]	0.33			0.13			12.23			14.42		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.85											
Intersection LOS	C											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.576

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	65	54	531	89	64	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	65	54	531	89	64	563
Peak Hour Factor	0.7539	0.7539	0.7539	0.7539	0.7539	0.7539
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	18	176	30	21	187
Total Analysis Volume [veh/h]	86	72	704	118	85	747
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	13	0	39	0	13	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	7	7	37	37	6	47
g / C, Green / Cycle	0.10	0.10	0.57	0.57	0.09	0.72
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.23	0.24	0.05	0.42
s, saturation flow rate [veh/h]	1683	1480	1776	1690	1703	1784
c, Capacity [veh/h]	173	152	1006	958	147	1291
d1, Uniform Delay [s]	27.63	27.56	7.96	8.08	28.63	4.28
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.19	2.27	1.23	1.40	3.56	1.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.50	0.47	0.41	0.43	0.58	0.58
d, Delay for Lane Group [s/veh]	29.82	29.83	9.19	9.48	32.18	6.17
Lane Group LOS	C	C	A	A	C	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.29	1.09	2.61	2.68	1.31	2.51
50th-Percentile Queue Length [ft/ln]	32.36	27.22	65.33	66.96	32.64	62.65
95th-Percentile Queue Length [veh/ln]	2.33	1.96	4.70	4.82	2.35	4.51
95th-Percentile Queue Length [ft/ln]	58.25	48.99	117.59	120.53	58.75	112.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.82	29.83	9.31	9.48	32.18	6.17
Movement LOS	C	C	A	A	C	A
d_A, Approach Delay [s/veh]	29.83		9.33		8.83	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	10.89					
Intersection LOS	B					
Intersection V/C	0.576					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.47	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.059	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	243	1008	1408
d_b, Bicycle Delay [s]	25.12	8.01	2.86
l_b,int, Bicycle LOS Score for Intersection	1.560	2.238	2.932
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	21	152	0	0	162	32	15	0	17	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	1.70	0.00	0.00	0.00	5.10	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]	21	152	0	0	162	32	15	0	17	0	0	0
Peak Hour Factor	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906
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]	6	43	0	0	45	9	4	0	5	0	0	0
Total Analysis Volume [veh/h]	24	171	0	0	182	36	17	0	19	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	7.54	0.00	0.00	12.01	12.26	9.56	11.85	12.11	9.10
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.00	0.00	0.00	0.17	0.17	0.17	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.01	1.01	1.01	0.00	0.00	0.00	4.28	4.28	4.28	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.95			0.00			10.72			11.02		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.27											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	11	166	8	2	171	4	1	6	6	10	4	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.50	0.00	0.00	1.60	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	166	8	2	171	4	1	6	6	10	4	5
Peak Hour Factor	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206
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	45	2	1	46	1	0	2	2	3	1	1
Total Analysis Volume [veh/h]	12	180	9	2	186	4	1	7	7	11	4	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.02	0.01	0.01
d_M, Delay for Movement [s/veh]	7.60	0.00	0.00	7.58	0.00	0.00	11.02	11.88	8.91	11.07	11.87	8.94
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.09	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.65	0.00	0.00	0.11	0.00	0.00	1.70	1.70	1.70	2.37	2.37	2.37
d_A, Approach Delay [s/veh]	0.45			0.08			10.44			10.70		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.11											
Intersection LOS	B											

EXISTING PLUS AMBIENT GROWTH

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.594

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	64	124	572	126	214	502
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	68	131	606	134	227	532
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	36	168	37	63	147
Total Analysis Volume [veh/h]	75	145	672	149	252	590
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	15	0	38	0	22	60
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	9	9	37	37	13	55
g / C, Green / Cycle	0.12	0.12	0.49	0.49	0.18	0.73
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.24	0.25	0.15	0.34
s, saturation flow rate [veh/h]	1614	1502	1729	1625	1680	1733
c, Capacity [veh/h]	196	182	849	798	295	1262
d1, Uniform Delay [s]	30.41	32.10	12.75	13.00	30.02	4.20
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.23	7.67	1.97	2.36	6.94	1.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.80	0.48	0.51	0.85	0.47
d, Delay for Lane Group [s/veh]	31.64	39.77	14.71	15.37	36.96	5.45
Lane Group LOS	C	D	B	B	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.26	2.83	4.24	4.38	4.61	2.31
50th-Percentile Queue Length [ft/ln]	31.60	70.79	106.07	109.50	115.27	57.67
95th-Percentile Queue Length [veh/ln]	2.28	5.10	7.62	7.81	8.13	4.15
95th-Percentile Queue Length [ft/ln]	56.88	127.42	190.53	195.30	203.31	103.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.64	39.77	14.97	15.37	36.96	5.45
Movement LOS	C	D	B	B	D	A
d_A, Approach Delay [s/veh]	37.00		15.04		14.88	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	17.53					
Intersection LOS	B					
Intersection V/C	0.594					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.34	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.166	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	847	1434
d_b, Bicycle Delay [s]	28.28	12.47	3.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.237	2.949
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	5	172	0	0	372	19	25	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.80	0.00	0.00	0.60	0.00	1.90	0.00	3.60	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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	182	0	0	394	20	27	0	13	0	0	0
Peak Hour Factor	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403
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	54	0	0	117	6	8	0	4	0	0	0
Total Analysis Volume [veh/h]	6	217	0	0	469	24	32	0	15	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.09	0.00	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.34	0.00	0.00	7.64	0.00	0.00	16.60	16.24	12.40	15.59	15.19	9.35
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.40	0.40	0.40	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.25	0.25	0.25	0.00	0.00	0.00	9.96	9.96	9.96	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.22			0.00			15.26			13.38		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	1.01											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	9	166	49	6	376	3	2	3	10	55	4	8
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 [%]	5.90	3.60	3.00	0.00	3.00	25.00	14.30	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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]	10	176	52	6	399	3	2	3	11	58	4	8
Peak Hour Factor	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888
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	56	16	2	126	1	1	1	3	18	1	3
Total Analysis Volume [veh/h]	13	223	66	8	506	4	3	4	14	74	5	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.00	0.01	0.01	0.02	0.18	0.02	0.01
d_M, Delay for Movement [s/veh]	8.56	0.00	0.00	7.82	0.00	0.00	17.08	17.37	10.11	15.59	18.13	10.94
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.02	0.00	0.00	0.13	0.13	0.13	0.75	0.75	0.75
95th-Percentile Queue Length [ft/ln]	0.96	0.00	0.00	0.47	0.00	0.00	3.27	3.27	3.27	18.64	18.64	18.64
d_A, Approach Delay [s/veh]	0.37			0.12			12.49			15.21		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.92											
Intersection LOS	C											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	11.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	65	54	531	89	64	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	57	563	94	68	597
Peak Hour Factor	0.7539	0.7539	0.7539	0.7539	0.7539	0.7539
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	19	187	31	23	198
Total Analysis Volume [veh/h]	92	76	747	125	90	792
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	13	0	39	0	13	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	7	7	37	37	6	47
g / C, Green / Cycle	0.10	0.10	0.57	0.57	0.09	0.72
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.25	0.26	0.05	0.44
s, saturation flow rate [veh/h]	1683	1480	1776	1690	1703	1784
c, Capacity [veh/h]	175	154	1001	953	150	1290
d1, Uniform Delay [s]	27.67	27.58	8.22	8.35	28.59	4.51
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.44	2.44	1.38	1.58	3.77	2.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.53	0.49	0.44	0.46	0.60	0.61
d, Delay for Lane Group [s/veh]	30.12	30.02	9.60	9.94	32.37	6.70
Lane Group LOS	C	C	A	A	C	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.39	1.15	2.87	2.94	1.39	2.84
50th-Percentile Queue Length [ft/ln]	34.84	28.85	71.69	73.61	34.66	70.91
95th-Percentile Queue Length [veh/ln]	2.51	2.08	5.16	5.30	2.50	5.11
95th-Percentile Queue Length [ft/ln]	62.71	51.93	129.03	132.49	62.39	127.64

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.12	30.02	9.74	9.94	32.37	6.70
Movement LOS	C	C	A	A	C	A
d_A, Approach Delay [s/veh]	30.07		9.77		9.32	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	11.34					
Intersection LOS	B					
Intersection V/C	0.611					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.47	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.068	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	243	1008	1408
d_b, Bicycle Delay [s]	25.12	8.01	2.86
l_b,int, Bicycle LOS Score for Intersection	1.560	2.279	3.015
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	21	152	0	0	162	32	15	0	17	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	1.70	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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]	22	161	0	0	172	34	16	0	18	0	0	0
Peak Hour Factor	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906
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]	6	45	0	0	48	10	4	0	5	0	0	0
Total Analysis Volume [veh/h]	25	181	0	0	193	38	18	0	20	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.72	0.00	0.00	7.56	0.00	0.00	12.31	12.53	9.67	12.13	12.36	9.15
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.00	0.00	0.00	0.19	0.19	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.06	1.06	1.06	0.00	0.00	0.00	4.67	4.67	4.67	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.94			0.00			10.92			11.21		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.28											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	11	166	8	2	171	4	1	6	6	10	4	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.50	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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]	12	176	8	2	181	4	1	6	6	11	4	5
Peak Hour Factor	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206
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	48	2	1	49	1	0	2	2	3	1	1
Total Analysis Volume [veh/h]	13	191	9	2	197	4	1	7	7	12	4	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.02	0.01	0.01
d_M, Delay for Movement [s/veh]	7.63	0.00	0.00	7.60	0.00	0.00	11.21	12.11	8.95	11.27	12.11	8.99
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.10	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.71	0.00	0.00	0.11	0.00	0.00	1.74	1.74	1.74	2.57	2.57	2.57
d_A, Approach Delay [s/veh]	0.47			0.07			10.57			10.89		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.11											
Intersection LOS	B											

EXISTING PLUS AMBIENT GROWTH PLUS PROJECT

AM PEAK HOUR

Intersection Level Of Service Report

Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	18.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.607

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	64	124	572	126	214	502
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	11	0	2	4	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	142	606	136	231	532
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	39	168	38	64	147
Total Analysis Volume [veh/h]	83	157	672	151	256	590
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	15	0	38	0	22	60
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	10	10	36	36	13	54
g / C, Green / Cycle	0.13	0.13	0.48	0.48	0.18	0.72
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.24	0.25	0.15	0.34
s, saturation flow rate [veh/h]	1614	1502	1729	1624	1680	1733
c, Capacity [veh/h]	208	194	832	781	299	1249
d1, Uniform Delay [s]	30.04	31.82	13.26	13.54	29.94	4.45
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.23	7.84	2.10	2.53	6.96	1.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.81	0.49	0.53	0.86	0.47
d, Delay for Lane Group [s/veh]	31.27	39.66	15.36	16.07	36.89	5.73
Lane Group LOS	C	D	B	B	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.39	3.06	4.39	4.53	4.68	2.46
50th-Percentile Queue Length [ft/ln]	34.73	76.57	109.74	113.37	117.02	61.49
95th-Percentile Queue Length [veh/ln]	2.50	5.51	7.83	8.03	8.23	4.43
95th-Percentile Queue Length [ft/ln]	62.51	137.83	195.64	200.68	205.72	110.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.27	39.66	15.64	16.07	36.89	5.73
Movement LOS	C	D	B	B	D	A
d_A, Approach Delay [s/veh]	36.76		15.71		15.16	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	18.11					
Intersection LOS	B					
Intersection V/C	0.607					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.34	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.175	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	847	1434
d_b, Bicycle Delay [s]	28.28	12.47	3.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.239	2.956
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-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):	0.100

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	5	172	0	0	372	19	25	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.80	0.00	0.00	0.60	0.00	1.90	0.00	3.60	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	6	0	0	0	0	0	17	0	18
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	182	6	6	394	20	27	0	13	17	0	18
Peak Hour Factor	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403
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	54	2	2	117	6	8	0	4	5	0	5
Total Analysis Volume [veh/h]	6	217	7	7	469	24	32	0	15	20	0	21
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.00	0.00	0.10	0.00	0.03	0.06	0.00	0.03
d_M, Delay for Movement [s/veh]	8.34	0.00	0.00	7.66	0.00	0.00	17.59	16.77	12.56	16.68	16.22	10.08
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.01	0.01	0.43	0.43	0.43	0.28	0.28	0.28
95th-Percentile Queue Length [ft/ln]	0.25	0.25	0.25	0.30	0.30	0.30	10.65	10.65	10.65	7.05	7.05	7.05
d_A, Approach Delay [s/veh]	0.22			0.11			15.99			13.30		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	1.71											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	9	166	49	6	376	3	2	3	10	55	4	8
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 [%]	5.90	3.60	3.00	0.00	3.00	25.00	14.30	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	0	17	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]	10	182	52	6	416	3	2	3	11	58	4	8
Peak Hour Factor	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888
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	58	16	2	132	1	1	1	3	18	1	3
Total Analysis Volume [veh/h]	13	231	66	8	527	4	3	4	14	74	5	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.00	0.01	0.01	0.02	0.18	0.02	0.01
d_M, Delay for Movement [s/veh]	8.63	0.00	0.00	7.84	0.00	0.00	17.63	17.87	10.21	16.01	18.71	11.10
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.02	0.00	0.00	0.13	0.13	0.13	0.77	0.77	0.77
95th-Percentile Queue Length [ft/ln]	0.98	0.00	0.00	0.47	0.00	0.00	3.37	3.37	3.37	19.35	19.35	19.35
d_A, Approach Delay [s/veh]	0.36			0.12			12.73			15.61		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.91											
Intersection LOS	C											

PM PEAK HOUR

Intersection Level Of Service Report

Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	11.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	65	54	531	89	64	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	7	0	8	12	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	74	64	563	102	80	597
Peak Hour Factor	0.7539	0.7539	0.7539	0.7539	0.7539	0.7539
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	21	187	34	27	198
Total Analysis Volume [veh/h]	98	85	747	135	106	792
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	13	0	39	0	13	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	7	7	36	36	6	47
g / C, Green / Cycle	0.10	0.10	0.56	0.56	0.09	0.72
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.25	0.26	0.06	0.44
s, saturation flow rate [veh/h]	1683	1480	1776	1685	1703	1784
c, Capacity [veh/h]	177	156	990	939	159	1287
d1, Uniform Delay [s]	27.71	27.68	8.49	8.64	28.55	4.54
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.70	2.97	1.45	1.68	4.71	2.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.55	0.45	0.47	0.67	0.62
d, Delay for Lane Group [s/veh]	30.40	30.65	9.94	10.33	33.26	6.75
Lane Group LOS	C	C	A	B	C	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.49	1.31	2.99	3.08	1.66	2.87
50th-Percentile Queue Length [ft/ln]	37.34	32.69	74.74	76.92	41.49	71.76
95th-Percentile Queue Length [veh/ln]	2.69	2.35	5.38	5.54	2.99	5.17
95th-Percentile Queue Length [ft/ln]	67.21	58.85	134.54	138.46	74.67	129.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.40	30.65	10.10	10.33	33.26	6.75
Movement LOS	C	C	B	B	C	A
d_A, Approach Delay [s/veh]	30.52		10.14		9.88	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	11.92					
Intersection LOS	B					
Intersection V/C	0.616					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.47	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.083	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	243	1008	1408
d_b, Bicycle Delay [s]	25.12	8.01	2.86
l_b,int, Bicycle LOS Score for Intersection	1.560	2.287	3.041
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-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):	0.040

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	21	152	0	0	162	32	15	0	17	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	1.70	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	20	20	0	0	0	0	0	11	0	12
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]	22	161	20	20	172	34	16	0	18	11	0	12
Peak Hour Factor	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906
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]	6	45	6	6	48	10	4	0	5	3	0	3
Total Analysis Volume [veh/h]	25	181	22	22	193	38	18	0	20	12	0	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.02	0.00	0.00	0.02	0.00	0.00	0.04	0.00	0.02	0.03	0.00	0.02
d_M, Delay for Movement [s/veh]	7.72	0.00	0.00	7.63	0.00	0.00	13.32	13.38	9.73	13.16	13.31	9.47
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.04	0.04	0.04	0.20	0.20	0.20	0.13	0.13	0.13
95th-Percentile Queue Length [ft/ln]	1.08	1.08	1.08	0.96	0.96	0.96	5.07	5.07	5.07	3.24	3.24	3.24
d_A, Approach Delay [s/veh]	0.85			0.66			11.43			11.24		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.98											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-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):	0.008

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	11	166	8	2	171	4	1	6	6	10	4	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.50	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	20	0	0	11	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]	12	196	8	2	192	4	1	6	6	11	4	5
Peak Hour Factor	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206
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	53	2	1	52	1	0	2	2	3	1	1
Total Analysis Volume [veh/h]	13	213	9	2	209	4	1	7	7	12	4	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.02	0.01	0.01
d_M, Delay for Movement [s/veh]	7.65	0.00	0.00	7.65	0.00	0.00	11.46	12.43	8.99	11.58	12.44	9.07
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.11	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.72	0.00	0.00	0.11	0.00	0.00	1.80	1.80	1.80	2.68	2.68	2.68
d_A, Approach Delay [s/veh]	0.42			0.07			10.76			11.14		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.05											
Intersection LOS	B											

OPENING YEAR (2028) WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	64	124	572	126	214	502
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	131	606	138	227	532
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	36	168	38	63	147
Total Analysis Volume [veh/h]	76	145	672	153	252	590
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	15	0	38	0	22	60
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	9	9	37	37	13	55
g / C, Green / Cycle	0.12	0.12	0.49	0.49	0.18	0.73
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.24	0.25	0.15	0.34
s, saturation flow rate [veh/h]	1614	1502	1729	1623	1680	1733
c, Capacity [veh/h]	196	182	849	797	295	1262
d1, Uniform Delay [s]	30.43	32.10	12.77	13.03	30.02	4.21
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.25	7.66	1.98	2.39	6.94	1.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.80	0.49	0.52	0.85	0.47
d, Delay for Lane Group [s/veh]	31.69	39.76	14.75	15.43	36.96	5.45
Lane Group LOS	C	D	B	B	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.28	2.83	4.27	4.41	4.61	2.31
50th-Percentile Queue Length [ft/ln]	32.06	70.78	106.80	110.34	115.27	57.68
95th-Percentile Queue Length [veh/ln]	2.31	5.10	7.66	7.86	8.13	4.15
95th-Percentile Queue Length [ft/ln]	57.70	127.40	191.54	196.48	203.31	103.83

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.69	39.76	15.01	15.43	36.96	5.45
Movement LOS	C	D	B	B	D	A
d_A, Approach Delay [s/veh]	36.98		15.09		14.88	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	17.56					
Intersection LOS	B					
Intersection V/C	0.596					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.34	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.168	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	847	1434
d_b, Bicycle Delay [s]	28.28	12.47	3.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.240	2.949
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.093

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	5	172	0	0	372	19	25	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.80	0.00	0.00	0.60	0.00	1.90	0.00	3.60	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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	0	4	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	183	0	0	398	20	27	0	13	0	0	0
Peak Hour Factor	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403
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	54	0	0	118	6	8	0	4	0	0	0
Total Analysis Volume [veh/h]	6	218	0	0	474	24	32	0	15	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.09	0.00	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.35	0.00	0.00	7.64	0.00	0.00	16.72	16.35	12.46	15.69	15.28	9.35
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.40	0.40	0.40	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.25	0.25	0.25	0.00	0.00	0.00	10.06	10.06	10.06	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.22			0.00			15.36			13.44		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	1.00											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	9	166	49	6	376	3	2	3	10	55	4	8
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 [%]	5.90	3.60	3.00	0.00	3.00	25.00	14.30	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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	0	4	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]	10	177	52	6	403	3	2	3	11	58	4	8
Peak Hour Factor	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888
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	56	16	2	128	1	1	1	3	18	1	3
Total Analysis Volume [veh/h]	13	224	66	8	511	4	3	4	14	74	5	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.00	0.01	0.01	0.02	0.18	0.02	0.01
d_M, Delay for Movement [s/veh]	8.57	0.00	0.00	7.82	0.00	0.00	17.20	17.48	10.13	15.67	18.24	10.97
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.02	0.00	0.00	0.13	0.13	0.13	0.75	0.75	0.75
95th-Percentile Queue Length [ft/ln]	0.97	0.00	0.00	0.47	0.00	0.00	3.29	3.29	3.29	18.77	18.77	18.77
d_A, Approach Delay [s/veh]	0.37			0.12			12.54			15.29		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.92											
Intersection LOS	C											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	65	54	531	89	64	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	57	563	96	68	597
Peak Hour Factor	0.7539	0.7539	0.7539	0.7539	0.7539	0.7539
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	19	187	32	23	198
Total Analysis Volume [veh/h]	97	76	747	127	90	792
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	13	0	39	0	13	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	7	7	37	37	6	47
g / C, Green / Cycle	0.10	0.10	0.56	0.56	0.09	0.72
(v / s)_i Volume / Saturation Flow Rate	0.06	0.05	0.25	0.26	0.05	0.44
s, saturation flow rate [veh/h]	1683	1480	1776	1689	1703	1784
c, Capacity [veh/h]	176	154	1000	952	150	1289
d1, Uniform Delay [s]	27.74	27.55	8.24	8.38	28.59	4.52
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.70	2.41	1.39	1.60	3.77	2.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.49	0.44	0.46	0.60	0.61
d, Delay for Lane Group [s/veh]	30.43	29.97	9.63	9.97	32.37	6.72
Lane Group LOS	C	C	A	A	C	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.48	1.15	2.88	2.96	1.39	2.85
50th-Percentile Queue Length [ft/ln]	36.98	28.81	72.04	74.01	34.66	71.22
95th-Percentile Queue Length [veh/ln]	2.66	2.07	5.19	5.33	2.50	5.13
95th-Percentile Queue Length [ft/ln]	66.57	51.86	129.67	133.21	62.39	128.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.43	29.97	9.77	9.97	32.37	6.72
Movement LOS	C	C	A	A	C	A
d_A, Approach Delay [s/veh]	30.23		9.80		9.34	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	11.42					
Intersection LOS	B					
Intersection V/C	0.615					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.47	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.070	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	243	1008	1408
d_b, Bicycle Delay [s]	25.12	8.01	2.86
l_b,int, Bicycle LOS Score for Intersection	1.560	2.281	3.015
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-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):	0.035

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	21	152	0	0	162	32	15	0	17	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	1.70	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	2	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]	22	165	0	0	174	34	16	0	18	0	0	0
Peak Hour Factor	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906
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]	6	46	0	0	49	10	4	0	5	0	0	0
Total Analysis Volume [veh/h]	25	185	0	0	195	38	18	0	20	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.73	0.00	0.00	7.57	0.00	0.00	12.37	12.59	9.68	12.20	12.42	9.17
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.00	0.00	0.00	0.19	0.19	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.06	1.06	1.06	0.00	0.00	0.00	4.71	4.71	4.71	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.92			0.00			10.96			11.26		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.27											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	11	166	8	2	171	4	1	6	6	10	4	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.50	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	2	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]	12	180	8	2	183	4	1	6	6	11	4	5
Peak Hour Factor	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206
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	49	2	1	50	1	0	2	2	3	1	1
Total Analysis Volume [veh/h]	13	196	9	2	199	4	1	7	7	12	4	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.02	0.01	0.01
d_M, Delay for Movement [s/veh]	7.63	0.00	0.00	7.62	0.00	0.00	11.26	12.17	8.96	11.34	12.18	9.01
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.10	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.71	0.00	0.00	0.11	0.00	0.00	1.75	1.75	1.75	2.60	2.60	2.60
d_A, Approach Delay [s/veh]	0.46			0.07			10.61			10.94		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.10											
Intersection LOS	B											

OPENING YEAR (2028) WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report

Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	18.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.609

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	64	124	572	126	214	502
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	11	0	6	4	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	142	606	140	231	532
Peak Hour Factor	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	39	168	39	64	147
Total Analysis Volume [veh/h]	84	157	672	155	256	590
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	15	0	38	0	22	60
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	10	10	36	36	13	54
g / C, Green / Cycle	0.13	0.13	0.48	0.48	0.18	0.72
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.24	0.25	0.15	0.34
s, saturation flow rate [veh/h]	1614	1502	1729	1622	1680	1733
c, Capacity [veh/h]	208	194	832	780	299	1249
d1, Uniform Delay [s]	30.06	31.82	13.28	13.57	29.94	4.45
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.26	7.84	2.12	2.57	6.96	1.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.81	0.50	0.53	0.86	0.47
d, Delay for Lane Group [s/veh]	31.31	39.66	15.40	16.13	36.89	5.73
Lane Group LOS	C	D	B	B	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.41	3.06	4.42	4.57	4.68	2.46
50th-Percentile Queue Length [ft/ln]	35.18	76.56	110.48	114.25	117.02	61.50
95th-Percentile Queue Length [veh/ln]	2.53	5.51	7.87	8.08	8.23	4.43
95th-Percentile Queue Length [ft/ln]	63.33	137.81	196.67	201.90	205.72	110.69

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.31	39.66	15.68	16.13	36.89	5.73
Movement LOS	C	D	B	B	D	A
d_A, Approach Delay [s/veh]	36.75		15.77		15.16	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	18.14					
Intersection LOS	B					
Intersection V/C	0.609					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.34	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.177	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	847	1434
d_b, Bicycle Delay [s]	28.28	12.47	3.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.242	2.956
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	17.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.101

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	5	172	0	0	372	19	25	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.80	0.00	0.00	0.60	0.00	1.90	0.00	3.60	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	6	6	4	0	0	0	0	17	0	18
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	183	6	6	398	20	27	0	13	17	0	18
Peak Hour Factor	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403	0.8403
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	54	2	2	118	6	8	0	4	5	0	5
Total Analysis Volume [veh/h]	6	218	7	7	474	24	32	0	15	20	0	21
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.00	0.00	0.10	0.00	0.03	0.06	0.00	0.03
d_M, Delay for Movement [s/veh]	8.35	0.00	0.00	7.66	0.00	0.00	17.72	16.87	12.63	16.79	16.32	10.10
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.01	0.01	0.43	0.43	0.43	0.28	0.28	0.28
95th-Percentile Queue Length [ft/ln]	0.25	0.25	0.25	0.30	0.30	0.30	10.76	10.76	10.76	7.11	7.11	7.11
d_A, Approach Delay [s/veh]	0.22			0.11			16.10			13.36		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	1.71											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-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):	0.016

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	9	166	49	6	376	3	2	3	10	55	4	8
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 [%]	5.90	3.60	3.00	0.00	3.00	25.00	14.30	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	0	0	21	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]	10	183	52	6	420	3	2	3	11	58	4	8
Peak Hour Factor	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888	0.7888
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	58	16	2	133	1	1	1	3	18	1	3
Total Analysis Volume [veh/h]	13	232	66	8	532	4	3	4	14	74	5	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.00	0.01	0.01	0.02	0.18	0.02	0.01
d_M, Delay for Movement [s/veh]	8.64	0.00	0.00	7.84	0.00	0.00	17.75	17.98	10.23	16.09	18.83	11.14
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.02	0.00	0.00	0.14	0.14	0.14	0.78	0.78	0.78
95th-Percentile Queue Length [ft/ln]	0.99	0.00	0.00	0.47	0.00	0.00	3.40	3.40	3.40	19.49	19.49	19.49
d_A, Approach Delay [s/veh]	0.36			0.12			12.78			15.69		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.91											
Intersection LOS	C											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.619

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	65	54	531	89	64	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	7	0	10	12	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	78	64	563	104	80	597
Peak Hour Factor	0.7539	0.7539	0.7539	0.7539	0.7539	0.7539
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	21	187	34	27	198
Total Analysis Volume [veh/h]	103	85	747	138	106	792
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	13	0	39	0	13	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	7	7	36	36	6	47
g / C, Green / Cycle	0.10	0.10	0.56	0.56	0.09	0.72
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.25	0.26	0.06	0.44
s, saturation flow rate [veh/h]	1683	1480	1776	1683	1703	1784
c, Capacity [veh/h]	177	156	989	938	159	1287
d1, Uniform Delay [s]	27.77	27.66	8.51	8.67	28.55	4.55
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.99	2.94	1.46	1.70	4.71	2.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.54	0.45	0.47	0.67	0.62
d, Delay for Lane Group [s/veh]	30.76	30.60	9.98	10.37	33.26	6.76
Lane Group LOS	C	C	A	B	C	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.58	1.31	3.01	3.10	1.66	2.88
50th-Percentile Queue Length [ft/ln]	39.54	32.66	75.20	77.44	41.49	72.00
95th-Percentile Queue Length [veh/ln]	2.85	2.35	5.41	5.58	2.99	5.18
95th-Percentile Queue Length [ft/ln]	71.17	58.79	135.35	139.40	74.67	129.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.76	30.60	10.14	10.37	33.26	6.76
Movement LOS	C	C	B	B	C	A
d_A, Approach Delay [s/veh]	30.69		10.18		9.89	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	12.00					
Intersection LOS	B					
Intersection V/C	0.619					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.47	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.086	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	243	1008	1408
d_b, Bicycle Delay [s]	25.12	8.01	2.86
l_b,int, Bicycle LOS Score for Intersection	1.560	2.290	3.041
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	13.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.040

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	21	152	0	0	162	32	15	0	17	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	1.70	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	20	20	2	0	0	0	0	11	0	12
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]	22	165	20	20	174	34	16	0	18	11	0	12
Peak Hour Factor	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906	0.8906
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]	6	46	6	6	49	10	4	0	5	3	0	3
Total Analysis Volume [veh/h]	25	185	22	22	195	38	18	0	20	12	0	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.02	0.00	0.00	0.02	0.00	0.00	0.04	0.00	0.02	0.03	0.00	0.02
d_M, Delay for Movement [s/veh]	7.73	0.00	0.00	7.64	0.00	0.00	13.40	13.45	9.75	13.24	13.38	9.50
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.04	0.04	0.04	0.20	0.20	0.20	0.13	0.13	0.13
95th-Percentile Queue Length [ft/ln]	1.08	1.08	1.08	0.96	0.96	0.96	5.11	5.11	5.11	3.27	3.27	3.27
d_A, Approach Delay [s/veh]	0.83			0.66			11.47			11.29		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.96											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	11	166	8	2	171	4	1	6	6	10	4	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.50	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	0	0	13	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]	12	200	8	2	194	4	1	6	6	11	4	5
Peak Hour Factor	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206	0.9206
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	54	2	1	53	1	0	2	2	3	1	1
Total Analysis Volume [veh/h]	13	217	9	2	211	4	1	7	7	12	4	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.01	0.02	0.01	0.01
d_M, Delay for Movement [s/veh]	7.66	0.00	0.00	7.66	0.00	0.00	11.50	12.49	9.00	11.63	12.50	9.08
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.11	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.72	0.00	0.00	0.11	0.00	0.00	1.81	1.81	1.81	2.70	2.70	2.70
d_A, Approach Delay [s/veh]	0.42			0.07			10.79			11.19		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.04											
Intersection LOS	B											

YEAR 2050 WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	67.5
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.003

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	75	243	1227	142	572	618
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	243	1227	142	572	618
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]	20	64	323	37	151	163
Total Analysis Volume [veh/h]	79	256	1292	149	602	651
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	26	0	57	0	47	104
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	21	21	51	51	42	98
g / C, Green / Cycle	0.16	0.16	0.39	0.39	0.33	0.75
(v / s)_i Volume / Saturation Flow Rate	0.05	0.16	0.39	0.41	0.34	0.36
s, saturation flow rate [veh/h]	1704	1586	1825	1761	1774	1829
c, Capacity [veh/h]	274	255	714	689	578	1376
d1, Uniform Delay [s]	47.97	54.52	39.57	39.57	43.82	6.20
k, delay calibration	0.11	0.21	0.50	0.50	0.48	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.57	37.55	36.06	47.03	48.31	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.29	1.00	1.01	1.05	1.04	0.47
d, Delay for Lane Group [s/veh]	48.54	92.07	75.63	86.60	92.13	7.37
Lane Group LOS	D	F	F	F	F	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.30	10.93	28.74	29.83	25.54	5.89
50th-Percentile Queue Length [ft/ln]	57.39	273.25	718.62	745.80	638.61	147.13
95th-Percentile Queue Length [veh/ln]	4.13	16.38	37.81	40.10	34.80	9.86
95th-Percentile Queue Length [ft/ln]	103.31	409.44	945.16	1002.47	869.97	246.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.54	92.07	80.48	86.60	92.13	7.37
Movement LOS	D	F	F	F	F	A
d_A, Approach Delay [s/veh]	81.81		81.11		48.09	
Approach LOS	F		F		D	
d_I, Intersection Delay [s/veh]	67.53					
Intersection LOS	E					
Intersection V/C	1.003					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.45	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.370	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	322	782	1505
d_b, Bicycle Delay [s]	45.77	24.12	3.98
l_b,int, Bicycle LOS Score for Intersection	1.560	2.748	3.627
Bicycle LOS	A	B	D

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	23.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.132

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	6	204	0	0	687	21	29	0	13	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.80	0.00	0.00	0.60	0.00	1.90	0.00	3.60	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]	6	204	0	0	687	21	29	0	13	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	54	0	0	181	6	8	0	3	0	0	0
Total Analysis Volume [veh/h]	6	215	0	0	723	22	31	0	14	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.00	0.13	0.00	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.14	0.00	0.00	7.63	0.00	0.00	23.00	21.67	16.25	20.78	19.26	9.34
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.58	0.58	0.58	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.25	0.25	0.25	0.00	0.00	0.00	14.62	14.62	14.62	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.25			0.00			20.90			16.46		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	0.98											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	25.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.046

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	20	190	55	12	671	19	9	11	31	61	11	12
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 [%]	5.90	3.60	3.00	0.00	3.00	25.00	14.30	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]	20	190	55	12	671	19	9	11	31	61	11	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	50	14	3	177	5	2	3	8	16	3	3
Total Analysis Volume [veh/h]	21	200	58	13	706	20	9	12	33	64	12	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.02	0.00	0.00	0.01	0.01	0.00	0.05	0.05	0.05	0.20	0.05	0.01
d_M, Delay for Movement [s/veh]	9.36	0.00	0.00	7.76	0.00	0.00	25.16	22.89	12.42	19.87	23.82	12.55
Movement LOS	A	A	A	A	A	A	D	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.08	0.00	0.00	0.03	0.00	0.00	0.53	0.53	0.53	1.03	1.03	1.03
95th-Percentile Queue Length [ft/ln]	1.90	0.00	0.00	0.75	0.00	0.00	13.18	13.18	13.18	25.81	25.81	25.81
d_A, Approach Delay [s/veh]	0.70			0.14			16.87			19.33		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	2.52											
Intersection LOS	D											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	21.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.812

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	162	271	859	107	153	908
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	162	271	859	107	153	908
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]	43	71	226	28	40	239
Total Analysis Volume [veh/h]	171	285	904	113	161	956
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	28	0	38	0	14	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	17	17	38	38	9	52
g / C, Green / Cycle	0.21	0.21	0.48	0.48	0.11	0.65
(v / s)_i Volume / Saturation Flow Rate	0.10	0.18	0.27	0.28	0.09	0.51
s, saturation flow rate [veh/h]	1777	1563	1874	1804	1798	1883
c, Capacity [veh/h]	376	330	899	865	199	1220
d1, Uniform Delay [s]	27.56	30.47	14.89	15.11	34.79	10.10
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.86	6.68	2.58	2.92	7.61	5.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.86	0.57	0.59	0.81	0.78
d, Delay for Lane Group [s/veh]	28.42	37.15	17.47	18.04	42.40	15.19
Lane Group LOS	C	D	B	B	D	B
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.82	5.64	6.22	6.36	3.29	10.00
50th-Percentile Queue Length [ft/ln]	70.53	141.12	155.48	159.03	82.23	250.04
95th-Percentile Queue Length [veh/ln]	5.08	9.54	10.31	10.50	5.92	15.19
95th-Percentile Queue Length [ft/ln]	126.96	238.53	257.73	262.44	148.02	379.71

Movement, Approach, & Intersection Results

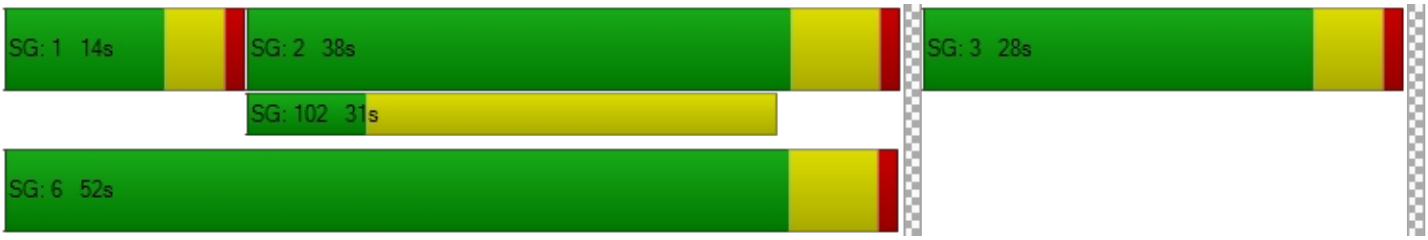
d_M, Delay for Movement [s/veh]	28.42	37.15	17.72	18.04	42.40	15.19
Movement LOS	C	D	B	B	D	B
d_A, Approach Delay [s/veh]	33.88		17.75		19.11	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	21.18					
Intersection LOS	C					
Intersection V/C	0.812					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.78	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.210	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	572	794	1144
d_b, Bicycle Delay [s]	20.40	14.54	7.33
l_b,int, Bicycle LOS Score for Intersection	1.560	2.399	3.403
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	19.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.069

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	36	467	0	0	272	35	17	0	19	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	1.70	0.00	0.00	0.00	5.10	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]	36	467	0	0	272	35	17	0	19	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	123	0	0	72	9	4	0	5	0	0	0
Total Analysis Volume [veh/h]	38	492	0	0	286	37	18	0	20	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.03	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.96	0.00	0.00	8.33	0.00	0.00	19.73	18.88	10.83	19.15	18.25	11.20
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.00	0.00	0.00	0.32	0.32	0.32	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.62	1.62	1.62	0.00	0.00	0.00	7.90	7.90	7.90	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.57			0.00			15.04			16.20		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	0.98											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	17.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.053

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	12	445	9	2	265	12	28	16	37	11	6	18
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	2.50	0.00	0.00	1.60	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]	12	445	9	2	265	12	28	16	37	11	6	18
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	117	2	1	70	3	7	4	10	3	2	5
Total Analysis Volume [veh/h]	13	468	9	2	279	13	29	17	39	12	6	19
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.07	0.05	0.04	0.04	0.02	0.02
d_M, Delay for Movement [s/veh]	7.84	0.00	0.00	8.29	0.00	0.00	15.69	17.76	10.58	16.84	16.90	10.33
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.01	0.00	0.00	0.61	0.61	0.61	0.26	0.26	0.26
95th-Percentile Queue Length [ft/ln]	0.77	0.00	0.00	0.14	0.00	0.00	15.34	15.34	15.34	6.53	6.53	6.53
d_A, Approach Delay [s/veh]	0.21			0.06			13.76			13.51		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.97											
Intersection LOS	C											

YEAR 2050 WITH PROJECT

AM PEAK HOUR

AM PEAK HOUR

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	75	243	1227	142	572	618
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	11	0	2	4	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	82	254	1227	144	576	618
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]	22	67	323	38	152	163
Total Analysis Volume [veh/h]	86	267	1292	152	606	651
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	25	0	58	0	47	105
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	20	20	52	52	42	99
g / C, Green / Cycle	0.15	0.15	0.40	0.40	0.33	0.76
(v / s)_i Volume / Saturation Flow Rate	0.05	0.17	0.40	0.41	0.34	0.36
s, saturation flow rate [veh/h]	1704	1586	1825	1760	1774	1829
c, Capacity [veh/h]	261	243	728	702	578	1390
d1, Uniform Delay [s]	49.06	55.02	38.87	39.07	43.82	5.82
k, delay calibration	0.11	0.23	0.50	0.50	0.49	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.73	69.14	31.53	41.63	50.59	1.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	1.10	0.99	1.03	1.05	0.47
d, Delay for Lane Group [s/veh]	49.79	124.16	70.40	80.70	94.41	6.96
Lane Group LOS	D	F	E	F	F	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.54	12.55	28.05	29.29	25.91	5.60
50th-Percentile Queue Length [ft/ln]	63.51	313.79	701.34	732.23	647.75	139.92
95th-Percentile Queue Length [veh/ln]	4.57	19.18	36.74	38.99	35.39	9.48
95th-Percentile Queue Length [ft/ln]	114.31	479.46	918.50	974.76	884.75	236.92

Movement, Approach, & Intersection Results

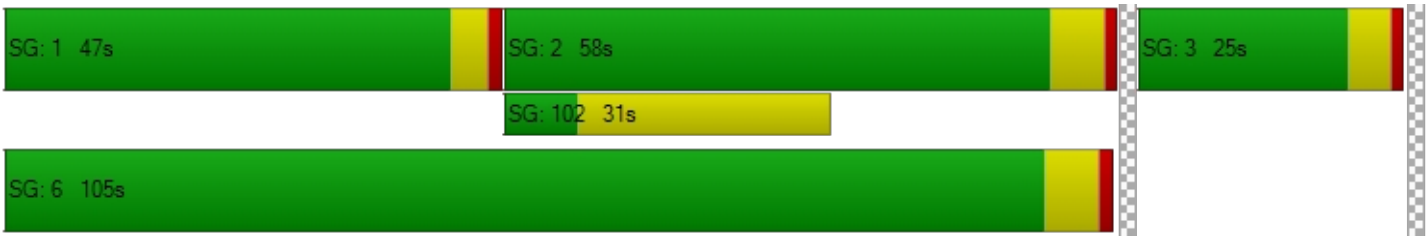
d_M, Delay for Movement [s/veh]	49.79	124.16	74.94	80.70	94.41	6.96
Movement LOS	D	F	E	F	F	A
d_A, Approach Delay [s/veh]	106.04		75.55		49.12	
Approach LOS	F		E		D	
d_I, Intersection Delay [s/veh]	68.19					
Intersection LOS	E					
Intersection V/C	1.014					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.45	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.379	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	306	797	1520
d_b, Bicycle Delay [s]	46.61	23.51	3.74
l_b,int, Bicycle LOS Score for Intersection	1.560	2.751	3.634
Bicycle LOS	A	C	D

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	24.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.142

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	6	204	0	0	687	21	29	0	13	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.80	0.00	0.00	0.60	0.00	1.90	0.00	3.60	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	6	6	0	0	0	0	0	17	0	18
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]	6	204	6	6	687	21	29	0	13	17	0	18
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	54	2	2	181	6	8	0	3	4	0	5
Total Analysis Volume [veh/h]	6	215	6	6	723	22	31	0	14	18	0	19
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.01	0.00	0.14	0.00	0.03	0.08	0.00	0.02
d_M, Delay for Movement [s/veh]	9.14	0.00	0.00	7.65	0.00	0.00	24.44	22.47	16.59	22.46	20.84	10.53
Movement LOS	A	A	A	A	A	A	C	C	C	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.01	0.01	0.62	0.62	0.62	0.35	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.25	0.25	0.25	0.25	0.25	0.25	15.59	15.59	15.59	8.67	8.67	8.67
d_A, Approach Delay [s/veh]	0.24			0.06			22.00			16.34		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	1.60											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	26.0
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.048

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	20	190	55	12	671	19	9	11	31	61	11	12
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 [%]	5.90	3.60	3.00	0.00	3.00	25.00	14.30	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	6	0	0	17	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]	20	196	55	12	688	19	9	11	31	61	11	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	52	14	3	181	5	2	3	8	16	3	3
Total Analysis Volume [veh/h]	21	206	58	13	724	20	9	12	33	64	12	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.03	0.00	0.00	0.01	0.01	0.00	0.05	0.06	0.05	0.20	0.05	0.01
d_M, Delay for Movement [s/veh]	9.43	0.00	0.00	7.77	0.00	0.00	26.00	23.54	12.60	20.43	24.57	12.81
Movement LOS	A	A	A	A	A	A	D	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.08	0.00	0.00	0.03	0.00	0.00	0.54	0.54	0.54	1.07	1.07	1.07
95th-Percentile Queue Length [ft/ln]	1.94	0.00	0.00	0.75	0.00	0.00	13.61	13.61	13.61	26.73	26.73	26.73
d_A, Approach Delay [s/veh]	0.69			0.13			17.27			19.88		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	2.53											
Intersection LOS	D											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	21.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.818

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	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]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	162	271	859	107	153	908
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	7	0	8	12	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	278	859	115	165	908
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]	44	73	226	30	43	239
Total Analysis Volume [veh/h]	176	293	904	121	174	956
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.1	0.0	5.2	0.0	3.6	5.2
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	28	0	38	0	14	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.1	0.0	4.2	0.0	2.6	4.2
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	5.10	5.10	6.20	6.20	4.60	6.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	4.20	4.20	2.60	4.20
g_i, Effective Green Time [s]	17	17	37	37	9	51
g / C, Green / Cycle	0.22	0.22	0.47	0.47	0.12	0.64
(v / s)_i Volume / Saturation Flow Rate	0.10	0.19	0.27	0.28	0.10	0.51
s, saturation flow rate [veh/h]	1777	1563	1874	1800	1798	1883
c, Capacity [veh/h]	384	338	876	841	212	1210
d1, Uniform Delay [s]	27.30	30.27	15.65	15.90	34.49	10.39
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.85	6.73	2.86	3.28	7.60	5.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.87	0.59	0.61	0.82	0.79
d, Delay for Lane Group [s/veh]	28.16	37.01	18.51	19.19	42.09	15.68
Lane Group LOS	C	D	B	B	D	B
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.89	5.80	6.53	6.69	3.54	10.27
50th-Percentile Queue Length [ft/ln]	72.23	144.95	163.16	167.27	88.54	256.79
95th-Percentile Queue Length [veh/ln]	5.20	9.75	10.72	10.93	6.37	15.53
95th-Percentile Queue Length [ft/ln]	130.02	243.67	267.90	273.32	159.37	388.19

Movement, Approach, & Intersection Results

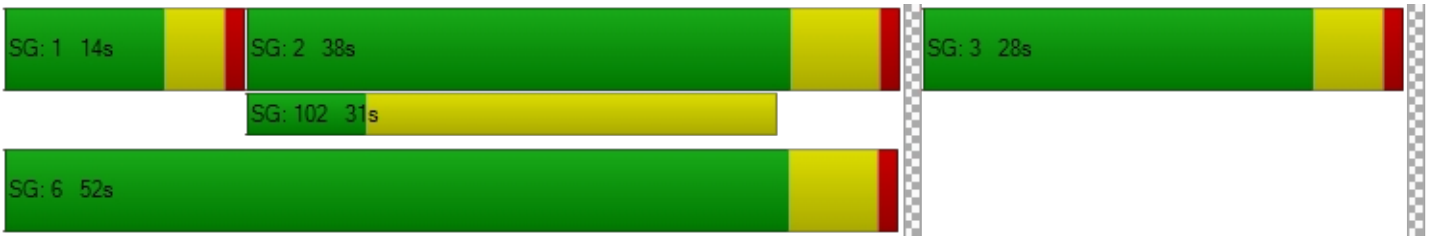
d_M, Delay for Movement [s/veh]	28.16	37.01	18.80	19.19	42.09	15.68
Movement LOS	C	D	B	B	D	B
d_A, Approach Delay [s/veh]	33.69		18.85		19.75	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	21.89					
Intersection LOS	C					
Intersection V/C	0.818					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.78	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.223	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	572	794	1144
d_b, Bicycle Delay [s]	20.40	14.54	7.33
l_b,int, Bicycle LOS Score for Intersection	1.560	2.405	3.424
Bicycle LOS	A	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 2: Linden Ave (NS) at Candlewood Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	22.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.079

Intersection Setup

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
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			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Linden Ave			Linden Ave			Candlewood Ave			Candlewood Ave		
Base Volume Input [veh/h]	36	467	0	0	272	35	17	0	19	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	1.70	0.00	0.00	0.00	5.10	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	20	20	0	0	0	0	0	11	0	12
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]	36	467	20	20	272	35	17	0	19	11	0	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	123	5	5	72	9	4	0	5	3	0	3
Total Analysis Volume [veh/h]	38	492	21	21	286	37	18	0	20	12	0	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.03	0.00	0.00	0.02	0.00	0.00	0.08	0.00	0.03	0.05	0.00	0.02
d_M, Delay for Movement [s/veh]	7.96	0.00	0.00	8.41	0.00	0.00	22.03	20.62	11.06	21.63	20.46	12.16
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	0.04	0.04	0.04	0.35	0.35	0.35	0.24	0.24	0.24
95th-Percentile Queue Length [ft/ln]	1.63	1.63	1.63	0.91	0.91	0.91	8.84	8.84	8.84	6.06	6.06	6.06
d_A, Approach Delay [s/veh]	0.55			0.51			16.26			16.71		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	1.58											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Linden Ave (NS) at Summit Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.056

Intersection Setup

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	45.00	100.00	100.00	45.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Linden Ave			Linden Ave			Summit Ave			Summit Ave		
Base Volume Input [veh/h]	12	445	9	2	265	12	28	16	37	11	6	18
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	2.50	0.00	0.00	1.60	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	20	0	0	11	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]	12	465	9	2	276	12	28	16	37	11	6	18
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	122	2	1	73	3	7	4	10	3	2	5
Total Analysis Volume [veh/h]	13	489	9	2	291	13	29	17	39	12	6	19
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.08	0.06	0.04	0.04	0.02	0.02
d_M, Delay for Movement [s/veh]	7.87	0.00	0.00	8.35	0.00	0.00	16.16	18.37	10.73	17.44	17.47	10.46
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.01	0.00	0.00	0.64	0.64	0.64	0.27	0.27	0.27
95th-Percentile Queue Length [ft/ln]	0.78	0.00	0.00	0.14	0.00	0.00	15.94	15.94	15.94	6.80	6.80	6.80
d_A, Approach Delay [s/veh]	0.20			0.05			14.11			13.86		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.95											
Intersection LOS	C											

YEAR 2050 WITHOUT PROJECT

WITH IMPROVEMENTS

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.840

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	100.00
No. of Lanes in Exit Pocket	0	1	0	0	0	0
Exit Pocket Length [ft]	0.00	100.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	75	243	1227	142	572	618
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	243	1227	142	572	618
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]	20	64	323	37	151	163
Total Analysis Volume [veh/h]	79	256	1292	149	602	651
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups		1,8				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	7	0	7	7
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	2.0	2.0	2.0	0.0	2.0	2.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	12	12	34	0	29	63
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	1.0	1.0	1.0	0.0	1.0	1.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	0.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	9	29	40	40	17	60
g / C, Green / Cycle	0.12	0.38	0.54	0.54	0.22	0.80
(v / s)_i Volume / Saturation Flow Rate	0.05	0.16	0.39	0.41	0.17	0.36
s, saturation flow rate [veh/h]	1704	1586	1825	1761	3445	1829
c, Capacity [veh/h]	206	606	982	947	762	1462
d1, Uniform Delay [s]	30.42	17.09	13.24	13.57	27.59	2.35
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.17	0.47	4.86	5.73	1.88	0.98
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.42	0.73	0.76	0.79	0.45
d, Delay for Lane Group [s/veh]	31.59	17.56	18.10	19.30	29.48	3.34
Lane Group LOS	C	B	B	B	C	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.33	3.07	8.53	8.89	4.82	1.02
50th-Percentile Queue Length [ft/ln]	33.20	76.67	213.19	222.17	120.58	25.48
95th-Percentile Queue Length [veh/ln]	2.39	5.52	13.32	13.78	8.43	1.83
95th-Percentile Queue Length [ft/ln]	59.76	138.01	332.91	344.39	210.63	45.87

Movement, Approach, & Intersection Results

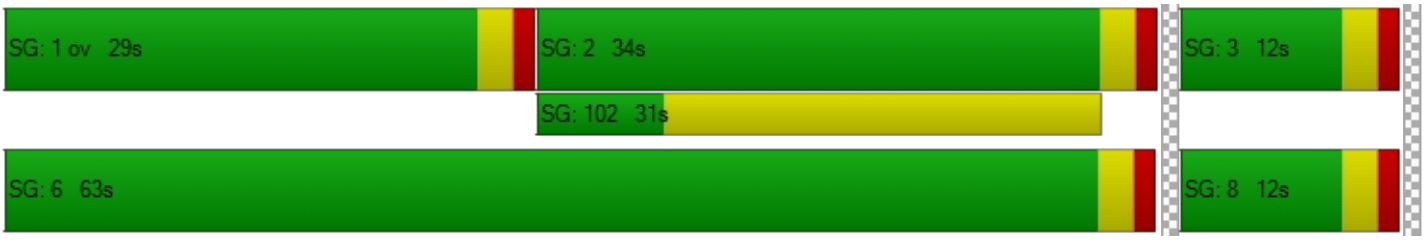
d_M, Delay for Movement [s/veh]	31.59	17.56	18.63	19.30	29.48	3.34
Movement LOS	C	B	B	B	C	A
d_A, Approach Delay [s/veh]	20.87		18.70		15.89	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	17.78					
Intersection LOS	B					
Intersection V/C	0.840					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.33	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.430	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	240	826	1599
d_b, Bicycle Delay [s]	29.06	12.93	1.51
l_b,int, Bicycle LOS Score for Intersection	1.560	2.748	3.627
Bicycle LOS	A	B	D

Sequence

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



PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	19.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.724

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	100.00
No. of Lanes in Exit Pocket	0	1	0	0	0	0
Exit Pocket Length [ft]	0.00	100.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	162	271	859	107	153	908
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	162	271	859	107	153	908
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]	43	71	226	28	40	239
Total Analysis Volume [veh/h]	171	285	904	113	161	956
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups		1,8				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	7	0	7	7
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	2.0	2.0	2.0	0.0	2.0	2.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	24	24	76	0	30	106
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	1.0	1.0	1.0	0.0	1.0	1.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	0.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	21	45	79	79	21	103
g / C, Green / Cycle	0.16	0.35	0.60	0.60	0.17	0.79
(v / s)_i Volume / Saturation Flow Rate	0.10	0.18	0.27	0.28	0.05	0.51
s, saturation flow rate [veh/h]	1777	1563	1874	1804	3492	1883
c, Capacity [veh/h]	285	545	1134	1091	577	1494
d1, Uniform Delay [s]	50.66	33.69	13.90	14.10	47.43	5.63
k, delay calibration	0.11	0.32	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.03	2.26	1.28	1.43	0.26	2.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.52	0.45	0.47	0.28	0.64
d, Delay for Lane Group [s/veh]	52.69	35.95	15.18	15.53	47.69	7.74
Lane Group LOS	D	D	B	B	D	A
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.31	7.45	7.87	8.01	2.26	8.44
50th-Percentile Queue Length [ft/ln]	132.63	186.20	196.75	200.25	56.55	210.89
95th-Percentile Queue Length [veh/ln]	9.08	11.92	12.47	12.65	4.07	13.20
95th-Percentile Queue Length [ft/ln]	227.07	298.09	311.77	316.28	101.79	329.98

Movement, Approach, & Intersection Results

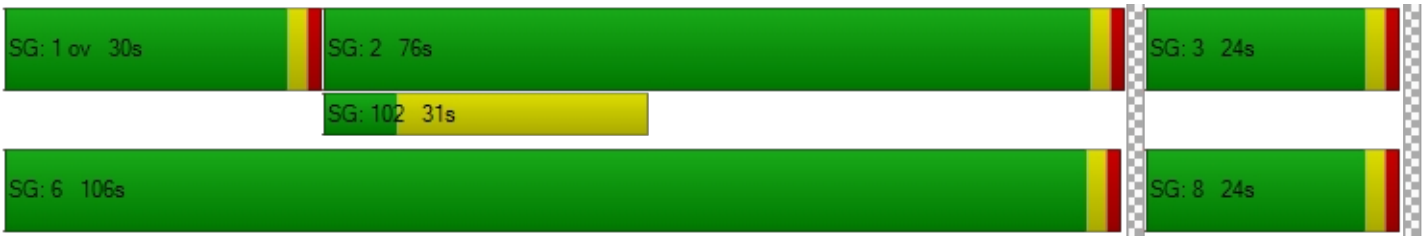
d_M, Delay for Movement [s/veh]	52.69	35.95	15.34	15.53	47.69	7.74
Movement LOS	D	D	B	B	D	A
d_A, Approach Delay [s/veh]	42.22		15.36		13.50	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	19.29					
Intersection LOS	B					
Intersection V/C	0.724					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.44	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.356	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	323	1124	1585
d_b, Bicycle Delay [s]	45.67	12.48	2.79
l_b,int, Bicycle LOS Score for Intersection	1.560	2.399	3.403
Bicycle LOS	A	B	C

Sequence

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



YEAR 2050 WITH PROJECT

WITH IMPROVEMENTS

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.848

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	100.00
No. of Lanes in Exit Pocket	0	1	0	0	0	0
Exit Pocket Length [ft]	0.00	100.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	75	243	1227	142	572	618
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.40	2.30	5.00	4.70	2.50	4.70
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	11	0	2	4	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	82	254	1227	144	576	618
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]	22	67	323	38	152	163
Total Analysis Volume [veh/h]	86	267	1292	152	606	651
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups		1,8				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	7	0	7	7
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	2.0	2.0	2.0	0.0	2.0	2.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	12	12	34	0	29	63
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	1.0	1.0	1.0	0.0	1.0	1.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	0.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	9	29	40	40	17	60
g / C, Green / Cycle	0.12	0.38	0.54	0.54	0.22	0.80
(v / s)_i Volume / Saturation Flow Rate	0.05	0.17	0.40	0.41	0.18	0.36
s, saturation flow rate [veh/h]	1704	1586	1825	1760	3445	1829
c, Capacity [veh/h]	206	608	979	944	767	1462
d1, Uniform Delay [s]	30.56	17.15	13.35	13.68	27.53	2.35
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.35	0.50	4.96	5.88	1.87	0.98
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.44	0.74	0.76	0.79	0.45
d, Delay for Lane Group [s/veh]	31.90	17.65	18.30	19.56	29.39	3.34
Lane Group LOS	C	B	B	B	C	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.46	3.22	8.61	8.99	4.85	1.02
50th-Percentile Queue Length [ft/ln]	36.40	80.42	215.31	224.66	121.23	25.48
95th-Percentile Queue Length [veh/ln]	2.62	5.79	13.43	13.90	8.46	1.83
95th-Percentile Queue Length [ft/ln]	65.51	144.75	335.63	347.57	211.51	45.87

Movement, Approach, & Intersection Results

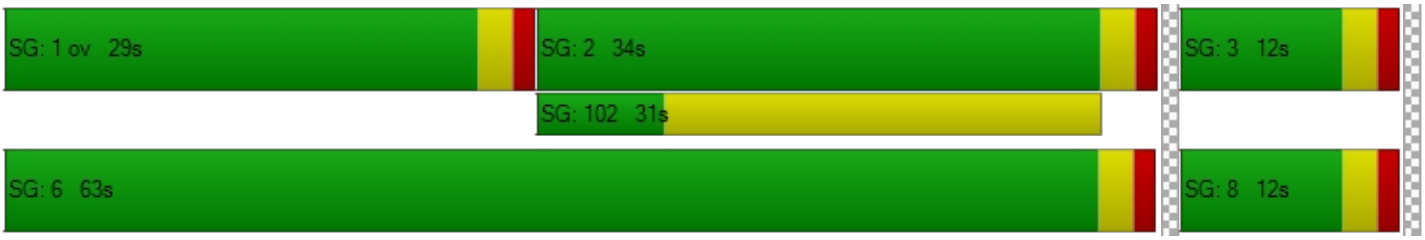
d_M, Delay for Movement [s/veh]	31.90	17.65	18.86	19.56	29.39	3.34
Movement LOS	C	B	B	B	C	A
d_A, Approach Delay [s/veh]	21.12		18.93		15.90	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	17.94					
Intersection LOS	B					
Intersection V/C	0.848					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	27.33	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.437	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	240	826	1599
d_b, Bicycle Delay [s]	29.06	12.93	1.51
l_b,int, Bicycle LOS Score for Intersection	1.560	2.751	3.634
Bicycle LOS	A	C	D

Sequence

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



PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Linden Ave (NS) at Riverside Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	19.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name	Linden Ave		Riverside Ave		Riverside Ave	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	80.00	100.00	100.00	170.00	100.00
No. of Lanes in Exit Pocket	0	1	0	0	0	0
Exit Pocket Length [ft]	0.00	100.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Linden Ave		Riverside Ave		Riverside Ave	
Base Volume Input [veh/h]	162	271	859	107	153	908
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.30	4.10	1.70	3.30	0.80	1.10
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	7	0	8	12	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	278	859	115	165	908
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]	44	73	226	30	43	239
Total Analysis Volume [veh/h]	176	293	904	121	174	956
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups		1,8				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	7	0	7	7
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	2.0	2.0	2.0	0.0	2.0	2.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	24	24	76	0	30	106
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	24	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	1.0	1.0	1.0	0.0	1.0	1.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	3.00	3.00	3.00	3.00	3.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	0.00	1.00	1.00	1.00	1.00
g_i, Effective Green Time [s]	21	46	78	78	22	103
g / C, Green / Cycle	0.16	0.35	0.60	0.60	0.17	0.79
(v / s)_i Volume / Saturation Flow Rate	0.10	0.19	0.27	0.28	0.05	0.51
s, saturation flow rate [veh/h]	1777	1563	1874	1800	3492	1883
c, Capacity [veh/h]	287	553	1124	1079	592	1492
d1, Uniform Delay [s]	50.70	33.37	14.32	14.55	47.17	5.69
k, delay calibration	0.11	0.33	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.12	2.41	1.33	1.50	0.27	2.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.53	0.46	0.47	0.29	0.64
d, Delay for Lane Group [s/veh]	52.82	35.77	15.66	16.05	47.44	7.81
Lane Group LOS	D	D	B	B	D	A
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.48	7.66	8.10	8.25	2.44	8.52
50th-Percentile Queue Length [ft/ln]	136.88	191.41	202.40	206.27	61.03	212.89
95th-Percentile Queue Length [veh/ln]	9.31	12.19	12.76	12.96	4.39	13.30
95th-Percentile Queue Length [ft/ln]	232.81	304.86	319.06	324.05	109.86	332.54

Movement, Approach, & Intersection Results

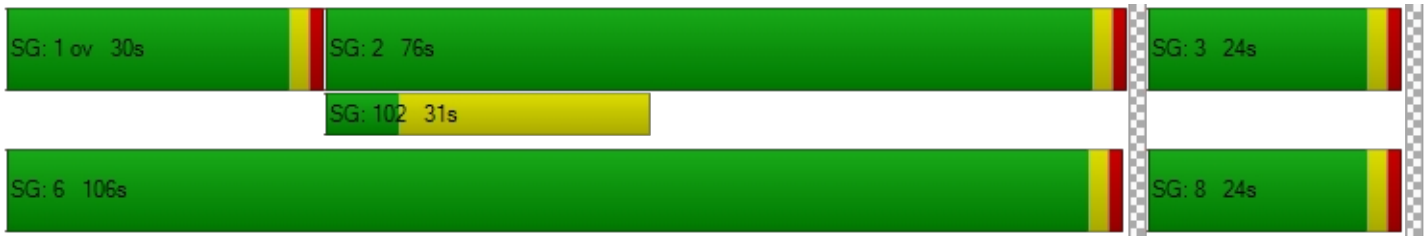
d_M, Delay for Movement [s/veh]	52.82	35.77	15.83	16.05	47.44	7.81
Movement LOS	D	D	B	B	D	A
d_A, Approach Delay [s/veh]	42.17		15.85		13.92	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	19.72					
Intersection LOS	B					
Intersection V/C	0.728					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	54.45	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.366	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	323	1123	1585
d_b, Bicycle Delay [s]	45.68	12.49	2.80
l_b,int, Bicycle LOS Score for Intersection	1.560	2.405	3.424
Bicycle LOS	A	B	C

Sequence

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



APPENDIX E

POST PROCESSING WORKSHEETS

AVERAGE DAILY TRAFFIC

ID	INTERSECTION	LEG	MODEL 2019 ADT	EXISTING 2025 ADT	MODEL 2050 ADT	FUTURE 2050 ADT[1]	OPENING 2028 ADT	GROWTH 2028 ADT	OPENING 2029 ADT	ADJUSTED BUILDOUT ADT[2]
1	Linden Avenue at:	North	-	-	-	-	-	-	-	-
	Riverside Avenue	South	5,057	3,200	9,558	10,510	3,640	3,400	3,460	10,510
		East	16,235	14,100	30,192	33,210	15,450	14,960	14,960	33,210
		West	15,754	14,500	22,732	25,010	15,180	15,390	15,450	25,010
2	Linden Avenue at:	North	5,057	4,200	9,558	10,510	4,640	4,460	4,520	10,510
	Candlewood Avenue	South	3,967	4,100	8,371	9,210	4,530	4,350	4,410	9,210
		East	-	-	-	-	-	-	-	-
		West	41	1,000	79	1,030	1,010	1,060	1,060	1,030
3	Linden Avenue at:	North	3,967	4,000	8,371	9,210	4,430	4,240	4,300	9,210
	Summit Avenue	South	4,906	4,300	8,594	9,450	4,660	4,560	4,620	9,450
		East	1,076	400	987	1,090	400	420	420	1,090
		West	135	400	519	570	440	420	420	570

Notes:

1. Future volumes adjusted for minimum 10% growth over existing average dally traffic volumes.
2. Future volumes adjusted for minimum 5% growth over opening year dally traffic volumes.

N/S: Linden Avenue (NS) / E/W: Riverside Avenue (EW) - #1

MORNING PEAK HOUR	EVENING PEAK HOUR
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):
2025	2025
0 0 0 < v > 0 ^ ^ 0 543 > < 482 121 v v 208 < ^ > 59 0 124	0 0 0 < v > 0 ^ ^ 0 524 > < 559 84 v v 63 < ^ > 63 0 52
EXISTING PEAK HOUR COUNT YEAR (AUTOS):	EXISTING PEAK HOUR COUNT YEAR (AUTOS):
2025	2025
0 0 v ^ 541 < IN = 1537 < 690 664 > OUT = 1537 > 667 v ^ 329 183	0 0 v ^ 622 < IN = 1345 < 622 608 > OUT = 1345 > 576 v ^ 147 115
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCEs):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCEs):
0 0 0 < v > 0 ^ ^ 0 50 > < 41 8 v v 9 < ^ > PCE FACTORS BY AXLE: 9 0 0	0 0 0 < v > 0 ^ ^ 0 12 > < 8 8 v v 2 < ^ > PCE FACTORS BY AXLE: 4 0 3
2: 1.5 3: 2.0 4+: 3.0	2: 1.5 3: 2 4+: 3.0
TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCEs):	TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCEs):
2025	2025
0 0 0 < v > 0 ^ ^ 0 593 > < 523 129 v v 217 < ^ > 68 0 124	0 0 0 < v > 0 ^ ^ 0 536 > < 567 92 v v 65 < ^ > 67 0 55
EXISTING PEAK PERIOD MODEL YEAR (AUTO):	EXISTING PEAK PERIOD MODEL YEAR (AUTO):
2019	2019
0 0 v ^ 1409 < IN = 3299 < 1292 1501 > OUT = 3298 > 1446 v ^ 443 506	0 0 v ^ 2206 < IN = 4759 < 2226 1803 > OUT = 4758 > 1866 v ^ 686 730
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2019	2019
0 0 v ^ 66 < IN = 140 < 68 36 > OUT = 140 > 42 v ^ 32 36	0 0 v ^ 62 < IN = 162 < 63 46 > OUT = 162 > 68 v ^ 32 53
EXISTING PEAK HOUR MODEL YEAR (PCEs):	EXISTING PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38 PHF FOR TRUCKS: 0.333	PHF FOR CARS: 0.28 PHF FOR TRUCKS: 0.25
0 0 v ^ 557 < IN = 1300 < 514 582 > OUT = 1300 > 563 v ^ 179 204	0 0 v ^ 633 < IN = 1373 < 639 516 > OUT = 1373 > 539 v ^ 200 218
FUTURE PEAK PERIOD MODEL YEAR (AUTO):	FUTURE PEAK PERIOD MODEL YEAR (AUTO):
2050	2050
0 0 v ^ 301 < IN = 5530 < 2289 2640 > OUT = 5531 > 3788 v ^ 1442 601	0 0 v ^ 4139 < IN = 9363 < 4152 3136 > OUT = 9363 > 4127 v ^ 1097 2075
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2050	2050
0 0 v ^ 131 < IN = 399 < 201 139 > OUT = 399 > 171 v ^ 97 59	0 0 v ^ 78 < IN = 362 < 107 142 > OUT = 362 > 218 v ^ 66 113

N/S: Linden Avenue (NS) / E/W: Riverside Avenue (EW) - #1

MORNING PEAK HOUR	EVENING PEAK HOUR
FUTURE PEAK HOUR MODEL YEAR (PCEs):	FUTURE PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
0 0	0 0
v ^	v ^
158 < IN = 2234 < 937	1178 < IN = 2712 < 1189
1049 > OUT = 2235 > 1496	914 > OUT = 2712 > 1210
v ^	v ^
580 248	324 609
RAW GROWTH (PCEs): 2019 TO 2050	RAW GROWTH (PCEs): 2019 TO 2050
CONVERSION OF TRUCKS TO: 2050	CONVERSION OF TRUCKS TO: 2050
FACTOR = 1.00	FACTOR = 1.00
0 0	0 0
v ^	v ^
-399 < > 423	545 < > 550
467 > > 933	397 > > 671
v ^	v ^
401 44	124 392
ADJUSTED GROWTH (PCEs): 2019 TO 2050	ADJUSTED GROWTH (PCEs): 2019 TO 2050
10.00 MINIMUM GROWTH %	10 MINIMUM GROWTH %
0 0	0 0
v ^	v ^
60 < IN = 930 < 420	550 < IN = 1340 < 550
470 > OUT = 1390 > 930	400 > OUT = 1340 > 670
v ^	v ^
400 40	120 390
PRORATED GROWTH (PCEs): 2025 TO 2050	PRORATED GROWTH (PCEs): 2025 TO 2050
25 YEARS	25 YEARS
0 0	0 0
v ^	v ^
50 < < 340	440 < < 440
380 > > 750	320 > > 540
v ^	v ^
320 30	100 310
NEW PROJECTED VOLUMES (PCEs): 2050	NEW PROJECTED VOLUMES (PCEs): 2050
0 0	0 0
v ^	v ^
640 < < 1080	1070 < < 1070
1100 > > 1470	950 > > 1130
v ^	v ^
670 220	260 430
YEAR 2028 GROWTH: 2025 TO 2028	YEAR 2028 GROWTH: 2025 TO 2028
3 YEARS	3 YEARS
0 0	0 0
v ^	v ^
10 < < 40	50 < < 50
50 > > 90	40 > > 60
v ^	v ^
40 0	10 40
INITIAL YEAR 2028 VOLUMES:	INITIAL YEAR 2028 VOLUMES:
2028	2028
0 0	0 0
v ^	v ^
600 < IN = 1740 < 780	680 < IN = 1510 < 680
770 > OUT = 1800 > 810	670 > OUT = 1500 > 650
v ^	v ^
390 190	170 160
BALANCED YEAR 2028 VOLUMES:	BALANCED YEAR 2028 VOLUMES:
2028	2028
0 0	0 0
v ^	v ^
600 < IN = 1810 < 810	680 < IN = 1510 < 680
800 > OUT = 1800 > 810	670 > OUT = 1500 > 650
v ^	v ^
390 200	170 160
ADT BY LEG:	ADT BY LEG:
2050	2050
0	0
N	N
25,010 W LEG E 33,210	25,010 W LEG E 33,210
S	S
10,510	10,510
ADT BY LEG:	ADT BY LEG:
2028	2028
0	0
N	N
15,180 W LEG E 15,450	15,180 W LEG E 15,450
S	S
3,640	3,640

N/S: Linden Avenue (NS) / E/W: Candlewood Avenue (EW) - #2

MORNING PEAK HOUR	EVENING PEAK HOUR
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):
2025 19 370 0	2025 32 162 0
< v >	< v >
24 ^ ^ 0	15 ^ ^ 0
0 > < 0	0 > < 0
12 v v 0	17 v v 0
< ^ >	< ^ >
5 171 0	20 149 0
EXISTING PEAK HOUR COUNT YEAR (AUTOS):	EXISTING PEAK HOUR COUNT YEAR (AUTOS):
2025 389 195	2025 194 164
v ^	v ^
24 < IN = 601 < 0	52 < IN = 395 < 0
36 > OUT = 601 > 0	32 > OUT = 395 > 0
v ^	v ^
382 176	179 169
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCEs):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCEs):
0 5 0	0 0 0
< v >	< v >
2 ^ ^ 0	0 ^ ^ 0
0 > < 0	0 > < 0
0 v v 0	0 v v 0
PCE FACTORS BY AXLE: < ^ >	PCE FACTORS BY AXLE: < ^ >
2: 1.5 3: 2.0 4+: 3.0 0 3 0	2: 1.5 3: 2 4+: 3.0 2 5 0
TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCEs):	TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCEs):
2025 19 375 0	2025 32 162 0
< v >	< v >
26 ^ ^ 0	15 ^ ^ 0
0 > < 0	0 > < 0
12 v v 0	17 v v 0
< ^ >	< ^ >
5 174 0	22 154 0
EXISTING PEAK PERIOD MODEL YEAR (AUTO):	EXISTING PEAK PERIOD MODEL YEAR (AUTO):
2019 443 506	2019 686 730
v ^	v ^
12 < IN = 911 < 0	89 < IN = 1323 < 0
139 > OUT = 911 > 0	12 > OUT = 1323 > 0
v ^	v ^
393 329	504 625
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2019 32 36	2019 32 53
v ^	v ^
0 < IN = 59 < 0	0 < IN = 75 < 0
0 > OUT = 59 > 0	0 > OUT = 75 > 0
v ^	v ^
23 27	22 43
EXISTING PEAK HOUR MODEL YEAR (PCEs):	EXISTING PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
179 204	200 218
v ^	v ^
5 < IN = 366 < 0	25 < IN = 389 < 0
53 > OUT = 366 > 0	3 > OUT = 389 > 0
v ^	v ^
157 134	147 186
FUTURE PEAK PERIOD MODEL YEAR (AUTO):	FUTURE PEAK PERIOD MODEL YEAR (AUTO):
2050 1442 601	2050 1097 2075
v ^	v ^
20 < IN = 1986 < 0	54 < IN = 3113 < 0
120 > OUT = 1986 > 0	10 > OUT = 3113 > 0
v ^	v ^
1365 424	984 2006
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2050 97 59	2050 66 113
v ^	v ^
0 < IN = 150 < 0	0 < IN = 175 < 0
0 > OUT = 150 > 0	0 > OUT = 176 > 0
v ^	v ^
91 53	63 109

N/S: Linden Avenue (NS) / E/W: Candlewood Avenue (EW) - #2

MORNING PEAK HOUR	EVENING PEAK HOUR
FUTURE PEAK HOUR MODEL YEAR (PCEs):	FUTURE PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	580 248	PHF FOR CARS: 0.28	324 609
PHF FOR TRUCKS: 0.333	v ^	PHF FOR TRUCKS: 0.25	v ^
8 < IN = 805 < 0	15 < IN = 915 < 0
46 > OUT = 805 > 0	3 > OUT = 916 > 0
v ^	v ^
549 179	291 589
RAW GROWTH (PCEs): 2019 TO 2050	RAW GROWTH (PCEs): 2019 TO 2050
CONVERSION OF TRUCKS TO: 2050	401 44	CONVERSION OF TRUCKS TO: 2050	124 392
FACTOR = 1.00	v ^	FACTOR = 1.00	v ^
3 < < 0	-10 < < 0
-7 > > 0	-1 > > 0
v ^	v ^
392 45	145 403
ADJUSTED GROWTH (PCEs): 2019 TO 2050	ADJUSTED GROWTH (PCEs): 2019 TO 2050
10.00 MINIMUM GROWTH %	400 40	10 MINIMUM GROWTH %	120 390
v ^	v ^
0 < IN = 440 < 0	10 < IN = 520 < 0
0 > OUT = 430 > 0	0 > OUT = 540 > 0
v ^	v ^
390 40	140 400
PRORATED GROWTH (PCEs): 2025 TO 2050	PRORATED GROWTH (PCEs): 2025 TO 2050
25 YEARS	320 30	25 YEARS	100 310
v ^	v ^
0 < < 0	10 < < 0
0 > > 0	0 > > 0
v ^	v ^
310 30	110 320
NEW PROJECTED VOLUMES (PCEs): 2050	NEW PROJECTED VOLUMES (PCEs): 2050
710 230	290 480
v ^	v ^
20 < < 0	60 < < 0
40 > > 0	30 > > 0
v ^	v ^
700 210	290 500
YEAR 2028 GROWTH: 2025 TO 2028	YEAR 2028 GROWTH: 2025 TO 2028
3 YEARS	40 0	3 YEARS	10 40
v ^	v ^
0 < < 0	0 < < 0
0 > > 0	0 > > 0
v ^	v ^
40 0	10 40
INITIAL YEAR 2028 VOLUMES:	INITIAL YEAR 2028 VOLUMES:
2028	430 200	2028	200 210
v ^	v ^
20 < IN = 650 < 0	50 < IN = 450 < 0
40 > OUT = 650 > 0	30 > OUT = 450 > 0
v ^	v ^
430 180	190 220
BALANCED YEAR 2028 VOLUMES:	BALANCED YEAR 2028 VOLUMES:
2028	430 200	2028	200 210
v ^	v ^
20 < IN = 650 < 0	50 < IN = 450 < 0
40 > OUT = 650 > 0	30 > OUT = 450 > 0
v ^	v ^
430 180	190 220
ADT BY LEG:	ADT BY LEG:
2050	10,510 N	2050	10,510 N
1,030 W LEG E 0	1,030 W LEG E 0
S 9,210	S 9,210
ADT BY LEG:	ADT BY LEG:
2028	4,640 N	2028	4,640 N
1,010 W LEG E 0	1,010 W LEG E 0
S 4,530	S 4,530

N/S: Linden Avenue (NS) / E/W: Summit Avenue (EW) - #3

MORNING PEAK HOUR	EVENING PEAK HOUR
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):
2025 2 366 6	2025 4 169 2
< v >	< v >
2 ^ ^ 8	1 ^ ^ 5
3 > < 4	6 > < 4
10 v v 55	6 v v 10
< ^ >	< ^ >
9 161 48	11 165 8
EXISTING PEAK HOUR COUNT YEAR (AUTOS):	EXISTING PEAK HOUR COUNT YEAR (AUTOS):
2025 374 171	2025 175 171
v ^	v ^
15 < IN = 674 < 67	19 < IN = 391 < 19
15 > OUT = 674 > 57	13 > OUT = 391 > 16
v ^	v ^
431 218	185 184
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCEs):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCEs):
2 17 0	0 3 0
< v >	< v >
0 ^ ^ 0	0 ^ ^ 0
0 > < 0	0 > < 0
0 v v 0	0 v v 0
PCE FACTORS BY AXLE: < ^ >	PCE FACTORS BY AXLE: < ^ >
2: 1.5 3: 2.0 4+: 3.0 0 9 2	2: 1.5 3: 2 4+: 3.0 0 2 0
TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCEs):	TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCEs):
2025 4 383 6	2025 4 172 2
< v >	< v >
2 ^ ^ 8	1 ^ ^ 5
3 > < 4	6 > < 4
10 v v 55	6 v v 10
< ^ >	< ^ >
9 170 50	11 167 8
EXISTING PEAK PERIOD MODEL YEAR (AUTO):	EXISTING PEAK PERIOD MODEL YEAR (AUTO):
2019 393 329	2019 504 625
v ^	v ^
71 < IN = 974 < 144	76 < IN = 1510 < 164
70 > OUT = 974 > 43	77 > OUT = 1510 > 192
v ^	v ^
531 367	617 765
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2019 23 27	2019 22 43
v ^	v ^
0 < IN = 51 < 0	0 < IN = 65 < 0
0 > OUT = 51 > 0	0 > OUT = 66 > 0
v ^	v ^
24 28	23 43
EXISTING PEAK HOUR MODEL YEAR (PCEs):	EXISTING PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
157 134	147 186
v ^	v ^
27 < IN = 387 < 55	21 < IN = 439 < 46
27 > OUT = 387 > 16	22 > OUT = 439 > 54
v ^	v ^
210 149	179 225
FUTURE PEAK PERIOD MODEL YEAR (AUTO):	FUTURE PEAK PERIOD MODEL YEAR (AUTO):
2050 1365 424	2050 984 2006
v ^	v ^
180 < IN = 2139 < 177	119 < IN = 3309 < 196
179 > OUT = 2139 > 46	386 > OUT = 3309 > 63
v ^	v ^
1489 418	1121 1743
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2050 91 53	2050 63 109
v ^	v ^
0 < IN = 144 < 0	0 < IN = 172 < 0
0 > OUT = 147 > 0	0 > OUT = 173 > 0
v ^	v ^
94 53	64 109

N/S: Linden Avenue (NS) / E/W: Summit Avenue (EW) - #3

MORNING PEAK HOUR	EVENING PEAK HOUR
FUTURE PEAK HOUR MODEL YEAR (PCEs):	FUTURE PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
549 179	291 589
v ^	v ^
68 < IN = 861 < 67	33 < IN = 970 < 55
68 > OUT = 862 > 17	108 > OUT = 970 > 18
v ^	v ^
597 176	330 515
RAW GROWTH (PCEs): 2019 TO 2050	RAW GROWTH (PCEs): 2019 TO 2050
CONVERSION OF TRUCKS TO: 2050	CONVERSION OF TRUCKS TO: 2050
FACTOR = 1.00	FACTOR = 1.00
392 45	145 403
v ^	v ^
41 < > 13	12 < > 9
41 > > 1	87 > > -36
v ^	v ^
387 28	151 290
ADJUSTED GROWTH (PCEs): 2019 TO 2050	ADJUSTED GROWTH (PCEs): 2019 TO 2050
10.00 MINIMUM GROWTH %	10 MINIMUM GROWTH %
390 40	140 400
v ^	v ^
40 < IN = 470 < 10	10 < IN = 530 < 10
40 > OUT = 480 > 10	90 > OUT = 560 > 0
v ^	v ^
390 30	150 290
PRORATED GROWTH (PCEs): 2025 TO 2050	PRORATED GROWTH (PCEs): 2025 TO 2050
25 YEARS	25 YEARS
310 30	110 320
v ^	v ^
30 < > 10	10 < > 10
30 > > 10	70 > > 0
v ^	v ^
310 20	120 230
NEW PROJECTED VOLUMES (PCEs): 2050	NEW PROJECTED VOLUMES (PCEs): 2050
700 210	290 490
v ^	v ^
50 < > 80	30 < > 30
50 > > 70	80 > > 20
v ^	v ^
760 250	310 420
YEAR 2028 GROWTH: 2025 TO 2028	YEAR 2028 GROWTH: 2025 TO 2028
3 YEARS	3 YEARS
40 0	10 40
v ^	v ^
0 < > 0	0 < > 0
0 > > 0	10 > > 0
v ^	v ^
40 0	10 30
INITIAL YEAR 2028 VOLUMES:	INITIAL YEAR 2028 VOLUMES:
2028	2028
430 180	190 210
v ^	v ^
20 < IN = 750 < 70	20 < IN = 450 < 20
20 > OUT = 750 > 60	20 > OUT = 450 > 20
v ^	v ^
490 230	200 220
BALANCED YEAR 2028 VOLUMES:	BALANCED YEAR 2028 VOLUMES:
2028	2028
430 180	190 210
v ^	v ^
20 < IN = 750 < 70	20 < IN = 450 < 20
20 > OUT = 750 > 60	20 > OUT = 450 > 20
v ^	v ^
490 230	200 220
ADT BY LEG:	ADT BY LEG:
2050	2050
9,210	9,210
N	N
570 W LEG E 1,090	570 W LEG E 1,090
S	S
9,450	9,450
ADT BY LEG:	ADT BY LEG:
2028	2028
4,430	4,430
N	N
440 W LEG E 410	440 W LEG E 410
S	S
4,660	4,660

APPENDIX F

GATE STACKING ANALYSIS

Table Gate Stacking Analysis[1]

PROJECT:	TTM20793 Rialto	DATE: 2025-0903	
LOCATION:	Project Access Gate	JN: 19828	

	AM Inbound	PM Inbound
DEMAND RATE (q) (veh/hr)	12	40
Minutes per vehicle	5.0	2.0
SERVICE RATE (Q) (veh/hr/channel)[2]	340	340
NO. OF SERVICE POSITIONS (N)	1	1
NO. OF STORAGE LANES (N1)	1	1
PROBABILITY OF NOT EXCEEDING (P) [3]	0.05	0.05
	P'=95%	P'=95%
UTILIZATION FACTOR (q/(N*Q))	0.04	0.12
LENGTH OF SERVICE VEHICLE (L) FEET	25.0	25.0
TRAFFIC INTENSITY (q/Q)	0.035	0.118
Q(M) VALUE [5]	0.04	0.00
NO. OF VEHICLES BEING SERVED (N)	1.00	1.00
NO. OF VEHICLES IN QUEUE (M)	-1.11	-0.60
M = ((LN(P) - LN(Q(M))/LN(p)) - 1	~0	~0
TOTAL NUMBER OF VEHICLES (N+M)	1.00	1.00
	~1	~1
NO. OF VEHICLES IN EACH LANE	1.00	1.00
PER LANE ((N+M)/N1)[6]	1	1
LENGTH OF QUEUE (L) FEET	25	25

Notes:

1. Source: *Transportation and Land Development* (Institute of Transportation Engineers, 1988).
2. Service rates obtained from *Entrance-Exit Design and Control for Major Parking Facilities* (Crommelin, 1972).
3. P' = confidence interval; probability that queue will not exceed the calculated value.
4. Vehicle length based on 65-foot California legal truck-trailer combination length of 74.5 feet.
5. 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*.
6. Fractional vehicles are rounded up.

APPENDIX G

TRAFFIC SIGNAL WARRANT WORKSHEET

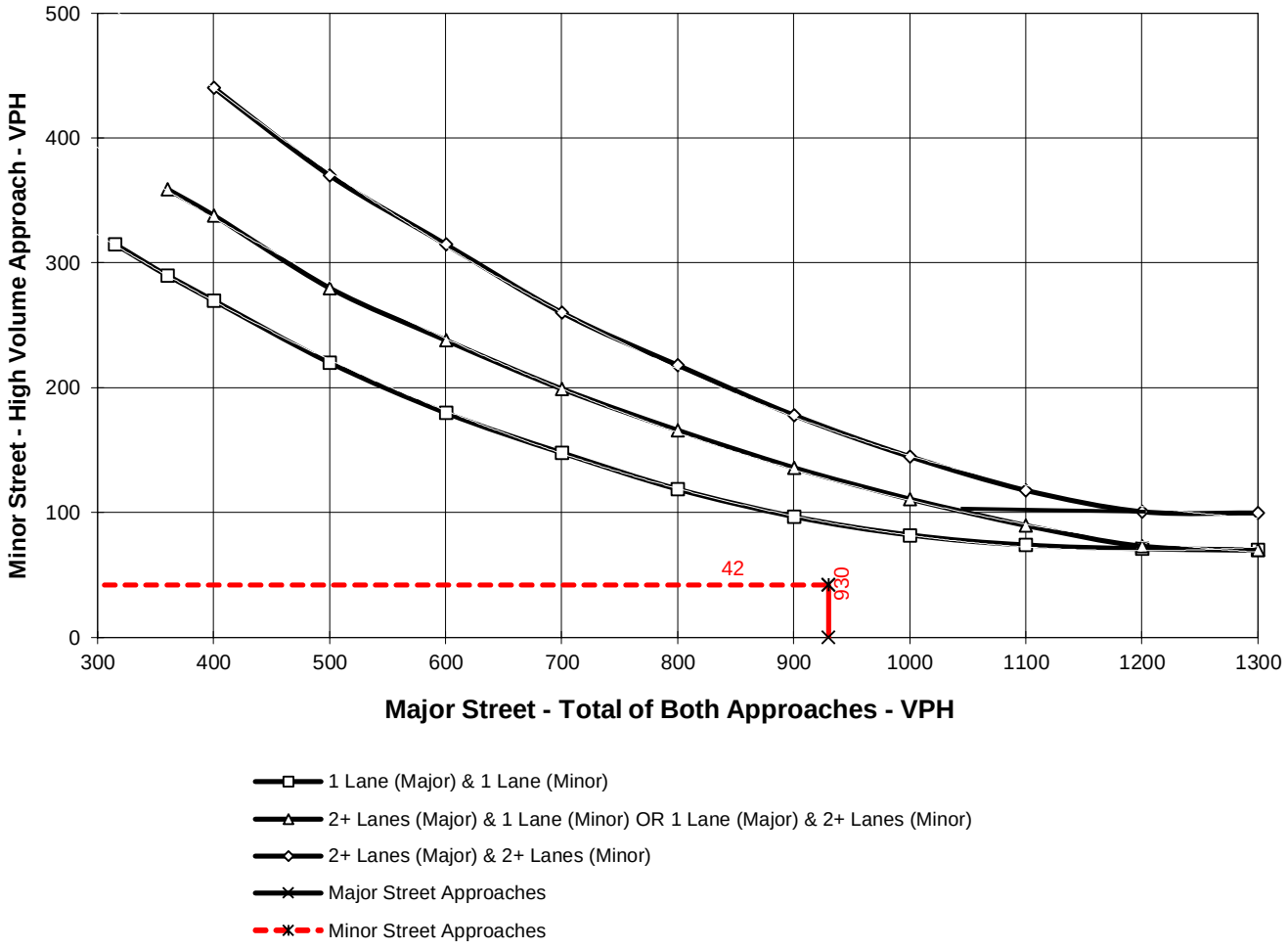
WARRANT 3, PEAK HOUR
(Rural Areas)

Traffic Conditions = **Year 2050 With Project - AM**

Major Street Name = **Linden Avenue** Total of Both Approaches (VPH) = **930**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Candlewood Avenue** High Volume Approach (VPH) = **42**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:
* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.
Major street approaches with less than 300 vph are low volume and outside the graph boundaries.

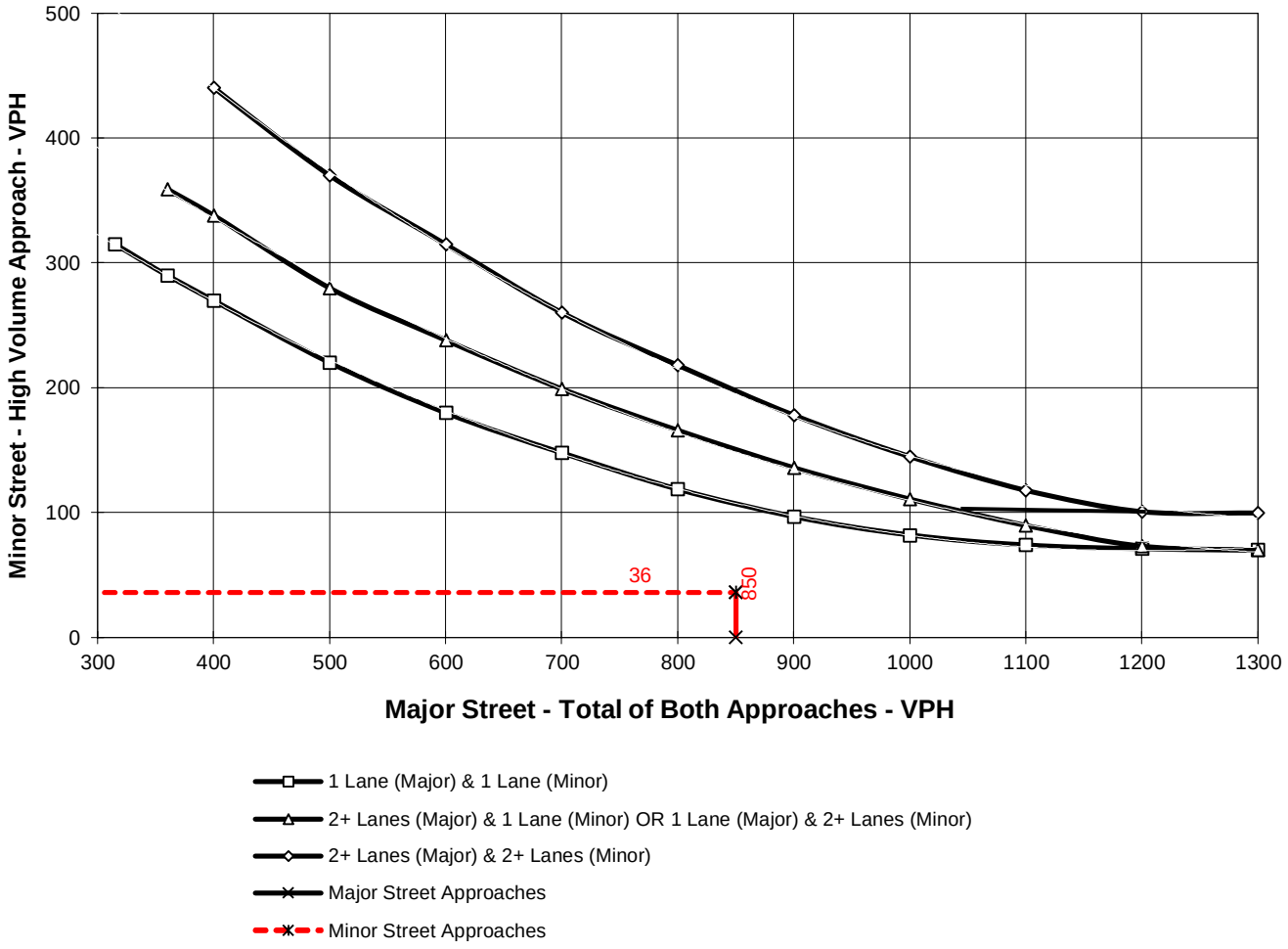
WARRANT 3, PEAK HOUR
(Rural Areas)

Traffic Conditions = **Year 2050 With Project - PM**

Major Street Name = **Linden Avenue** Total of Both Approaches (VPH) = **850**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Candlewood Avenue** High Volume Approach (VPH) = **36**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:
* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.
Major street approaches with less than 300 vph are low volume and outside the graph boundaries.

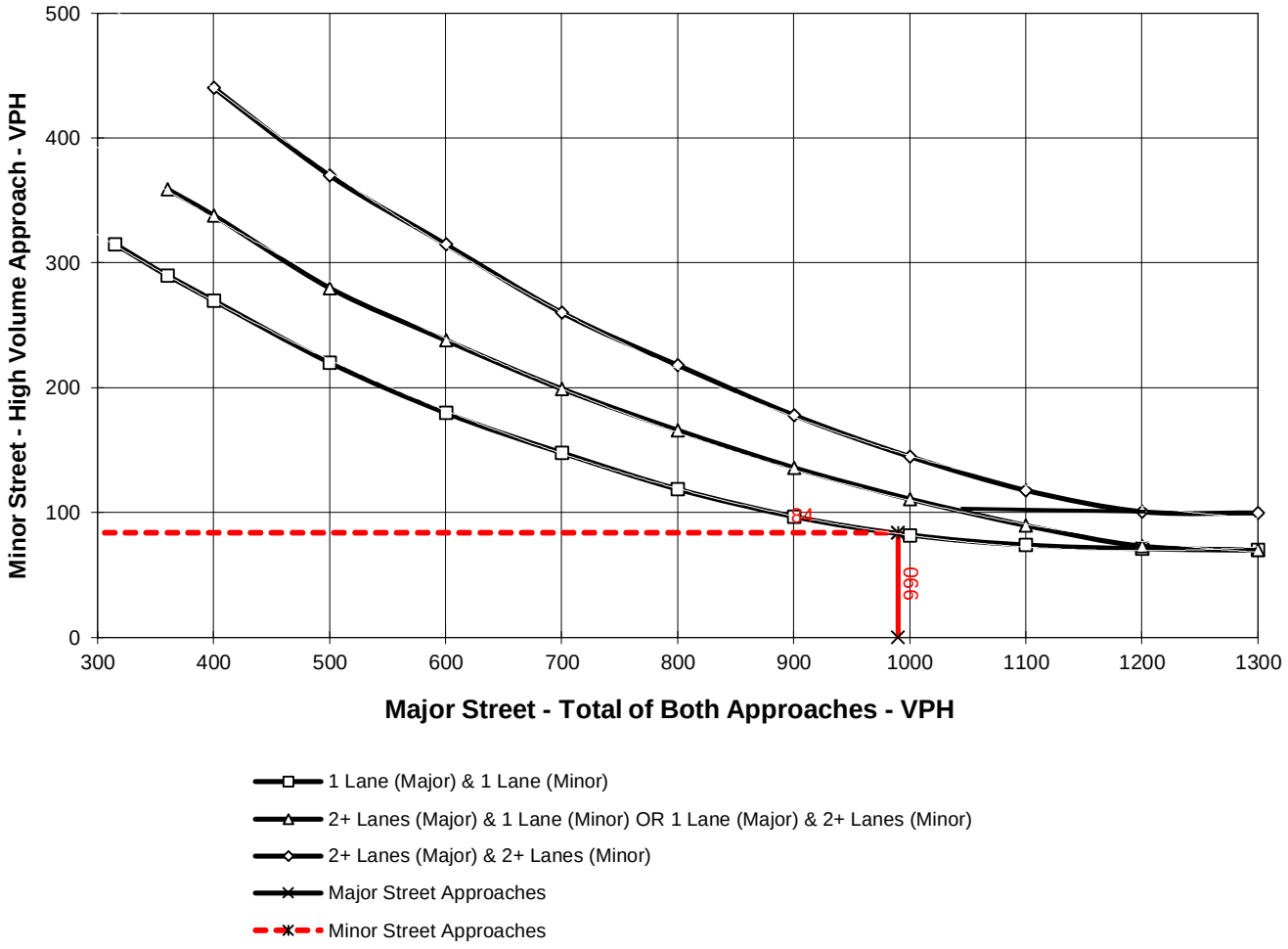
WARRANT 3, PEAK HOUR
(Rural Areas)

Traffic Conditions = **Year 2050 With Project - AM**

Major Street Name = **Linden Avenue** Total of Both Approaches (VPH) = **990**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Summit Avenue** High Volume Approach (VPH) = **84**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:
* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.
Major street approaches with less than 300 vph are low volume and outside the graph boundaries.

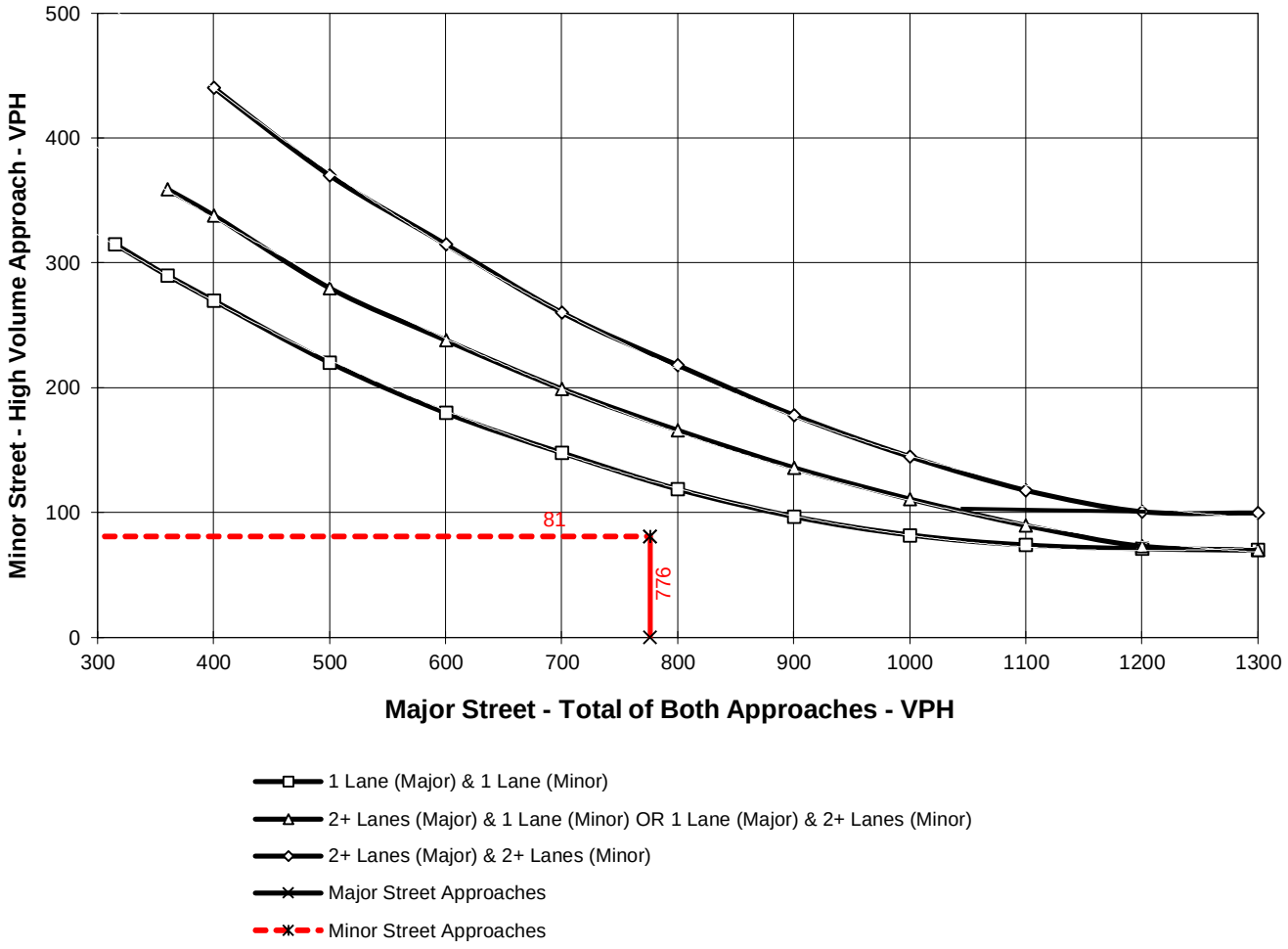
WARRANT 3, PEAK HOUR
(Rural Areas)

Traffic Conditions = **Year 2050 With Project - PM**

Major Street Name = **Linden Avenue** Total of Both Approaches (VPH) = **776**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Summit Avenue** High Volume Approach (VPH) = **81**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:
* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.
Major street approaches with less than 300 vph are low volume and outside the graph boundaries.



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