DRAFT

TRAFFIC STUDY FOR THE 8888 WASHINGTON BOULEVARD PROJECT

Prepared for:

THE RUNYON GROUP

FEBRUARY 2017

Submitted by:

RAJU Associates, Inc.

DRAFT

TRAFFIC STUDY
FOR THE
8888 WASHINGTON BOULEVARD PROJECT

FEBRUARY 2017

Prepared for:

THE RUNYON GROUP

Prepared by:

RAJU ASSOCIATES, INC.
505 E. Colorado Boulevard, Suite 202
Pasadena, California 91101
(626) 792-2700

Ref: RA 491

TABLE OF CONTENTS

	EXECUTIVE SUMMARY	1
I.	INTRODUCTION	3
	PROJECT DESCRIPTION	3
	STUDY SCOPE	6
	ORGANIZATION OF REPORT	8
II.	EXISTING CONDITIONS	9
	STUDY AREA	9
	EXISTING STREET SYSTEM	9
	EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE	13
	EXISTING TRANSIT SERVICE	21
	EXISTING BICYCLE FACILITIES	25
III.	PROJECT TRAFFIC PROJECTIONS	26
	PROJECT TRAFFIC VOLUMES	26
	EXISTING (2016) PLUS PROJECT TRAFFIC VOLUMES	28
IV.	FUTURE YEAR 2018 TRAFFIC PROJECTIONS	34
	CUMULATIVE (2018) BASE TRAFFIC PROJECTIONS	34
	CUMULATIVE (2018) PLUS PROJECT TRAFFIC VOLUMES	37
V.	TRAFFIC CONDITIONS & IMPACT ANALYSIS	46
	SIGNIFICANT TRAFFIC IMPACT CRITERIA	46
	EXISTING (2016) PLUS PROJECT TRAFFIC CONDITIONS	47
	CUMULATIVE (2018) BASE TRAFFIC CONDITIONS	50
	CUMULATIVE (2018) PLUS PROJECT TRAFFIC CONDITIONS	50
	PROJECT IMPACTS	51
VI.	STREET SEGMENT AND PARKING/ACCESS ANALYSIS	52
	REGIONAL STREET SEGMENT TRAFFIC IMPACT ANALYSIS	52
	PARKING EVALUATION	55
	ACCESS AND CIRCULATION	56
VII.	REGIONAL/CMP ANALYSIS	60
	CMP TRAFFIC IMPACT ANALYSIS	60
VIII.	CALTRANS FREEWAY IMPACT SCREENING ANALYSIS	62
	INITIAL STEPS	63
	FREEWAY MAINLINE SEGMENT SCREENING	63
	FREEWAY RAMP SCREENING	65
IX.	SUMMARY OF CONCLUSIONS	67

APPENDICES

LIST OF FIGURES

NO.

1	LOCATION OF PROJECT AND ANALYZED INTERSECTIONS	4
2	PROJECT SITE PLAN	5
3	EXISTING (2016) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES	14
4	EXISTING TRANSIT LINES	24
5	PROJECT TRIP DISTRIBUTION	29
6	PROJECT ONLY - PEAK HOUR TRAFFIC VOLUMES	30
7	EXISTING (2016) PLUS PROJECT CONDITIONS - PEAK HOUR TRAFFIC VOLUMES……	32
8	EXISTING PLUS AMBIENT GROWTH (2018) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES	35
9	LOCATION OF RELATED PROJECTS	39
10	RELATED PROJECTS ONLY - PEAK HOUR TRAFFIC VOLUMES	40
11	CUMULATIVE (2018) BASE CONDITIONS - PEAK HOUR TRAFFIC VOLUMES	42
12	CUMULATIVE (2018) PLUS PROJECT CONDITIONS - PEAK HOUR TRAFFIC VOLUMES	44
13	DISTRIBUTION OF PARKING SPACES BASED ON SERVICE RATE	58

LIST OF TABLES

NO.

1	LIST OF ANALYZED INTERSECTIONS	7
2	LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS	16
3	LEVEL OF SERVICE DEFINITIONS FOR UNSIGNALIZED INTERSECTIONS	17
4	EXISTING (2016) INTERSECTION LEVEL OF SERVICE ANALYSIS	20
5	ESTIMATED PROJECT TRIP GENERATION	27
6	ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS	38
7	SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS	48
8	RESIDENTIAL STREET TRAFFIC ANALYSIS	54
9	CALTRANS FREEWAY IMPACT SCREENING ANALYSIS - FREEWAY MAINLINE	64
10	CALTRANS FREEWAY IMPACT SCREENING ANALYSIS - FREEWAY OFF-RAMP	66

APPENDICES

A	MEMORANDUM OF UNDERSTANDING
B	INTERSECTION LANE CONFIGURATIONS
C	TRAFFIC COUNTS
D	LEVEL OF SERVICE WORKSHEETS
E	QUEUING ANALYSIS
F	EXPO-TO-DOWNTOWN BICYCLE CONNECTOR

EXECUTIVE SUMMARY

A detailed traffic study was performed by Raju Associates, Inc. to assess the traffic impacts of the proposed 8888 Washington Boulevard Mixed-Use Project within the City of Culver City, California. The Project is located at 8888 Washington Boulevard.

The Proposed Project consists of the construction of 59,325 square feet of office use, 2,878 square feet of retail use, and 3,184 square feet of restaurant use. The Project would provide 212 parking spaces. The ground floor would contain four loading spaces and one ADA van accessible space, and the subterranean parking levels would contain 207 spaces. The existing site contains an auto repair facility with a building size of 9,992 square feet which will be demolished.

As proposed, one driveway located along Washington Boulevard would provide access to the Project site.

Current and future traffic analyses at 26 intersections within the Cities of Culver City and Los Angeles were conducted in this study. At these locations, traffic operations were studied prior to and after implementation of the Proposed Project; deficiencies and impacts, if any, identified; improvements and mitigation measures, if required, developed; their effectiveness determined and residual traffic impacts, if any, ascertained as part of this study. Access and circulation at the proposed driveway to the parking area for the Project were also evaluated. The following executive summary highlighting the key findings of this study is presented below.

- Twenty-six intersections were analyzed within the study area for this project. These locations are within the study area bounded by Cattaraugus Avenue on the north, Jefferson Boulevard/Rodeo Road on the south, Hughes Avenue/Duquesne Avenue on the west and La Cienega Boulevard on the east. Of the 26 intersections, 14 intersections are located within the City of Culver City and 12 intersections within the City of Los Angeles.

- Currently, 24 of the 26 analyzed intersection locations are operating at levels of service (LOS) D or better during the morning peak hour. During the evening peak hour, 23 of the 26 analyzed intersections are operating at LOS D or better. The remaining intersections are operating at LOS E or F.

- In the Cumulative (Future Year 2018) Base conditions, i.e., future conditions without the implementation of the Proposed Project, 20 of the 26 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 19 of the 26 analyzed intersections are projected to operate at LOS D or better. The remaining intersections are projected to operate at LOS E or F.

- The Proposed Project consists of 59,325 square feet of office use, 2,878 square feet of retail use, and 3,184 square feet of restaurant use. The existing site contains an auto repair facility auto repair facility with a building size of 9,992 square feet which will be demolished. The Project is estimated to generate a net total of 100 trips during the morning peak hour and 124 trips during the evening peak hour.

- In the Existing (2016) plus Project conditions, both the morning and evening peak hour operating conditions would be similar to those for the Existing conditions. Under this scenario, 23 of the 26 analyzed intersection locations would continue to operate at acceptable levels of service (LOS) D or better during both the morning and evening peak hours. The remaining intersections would be operating at LOS E or F.

- The Existing (2016) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.

- In the Cumulative (Future Year 2018) plus Project conditions, both the morning and evening peak hour operating conditions would be similar to those projected for the Cumulative Base conditions. Under this scenario, 20 of the 26 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 19 of the 26 analyzed intersections are projected to operate at LOS D or better. The remaining intersections are projected to operate at LOS E or F.

- The Cumulative (Future Year 2018) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during both the weekday morning and evening peak hours.

- The Proposed Project would not have a significant impact on the residential streets in the local neighborhood.

- The Proposed Project would add less than 50 trips to the nearest Congestion Management Program (CMP) arterial monitoring locations and would add less than 150 trips in either direction to the nearest CMP mainline freeway monitoring locations during both the weekday morning and evening peak hours. Per CMP guidelines, no further CMP analysis is required.

- The Proposed Project shall make a contribution of $100,000 towards transportation improvements including Intelligent Transportation System (ITS) signal system improvements and bicycle and pedestrian system improvements. The contribution will be due at the time of issuance of a Certificate of Occupancy.

Summarizing, the Proposed Project would not cause any significant impacts at any of the analyzed intersections. Therefore, no project-specific mitigation measures would be required.

I. INTRODUCTION

This report documents the assumptions, methodologies and findings of a study conducted by Raju Associates, Inc., to evaluate the potential traffic impacts of the proposed project located at 8888 Washington Boulevard within the City of Culver City, California.

PROJECT DESCRIPTION

The Proposed Project is located on the south side of Washington Boulevard between Robertson Boulevard-Higuera Street and Landmark Street. Figure 1 illustrates the location of the Proposed Project in relation to the surrounding street system.

The Proposed Project consists of the construction of 59,325 square feet of office use, 2,878 square feet of retail use, and 3,184 square feet of restaurant use. The Project would provide 212 parking spaces. The ground floor would contain four loading spaces and one ADA van accessible space, and the subterranean parking levels would contain 207 spaces. The existing site contains an auto repair facility with a building size of 9,992 square feet which will be demolished.

As shown on Figure 2, the proposed project driveway is located along Washington Boulevard on the western boundary of the project site. The proposed project driveway would provide access to the Project site.

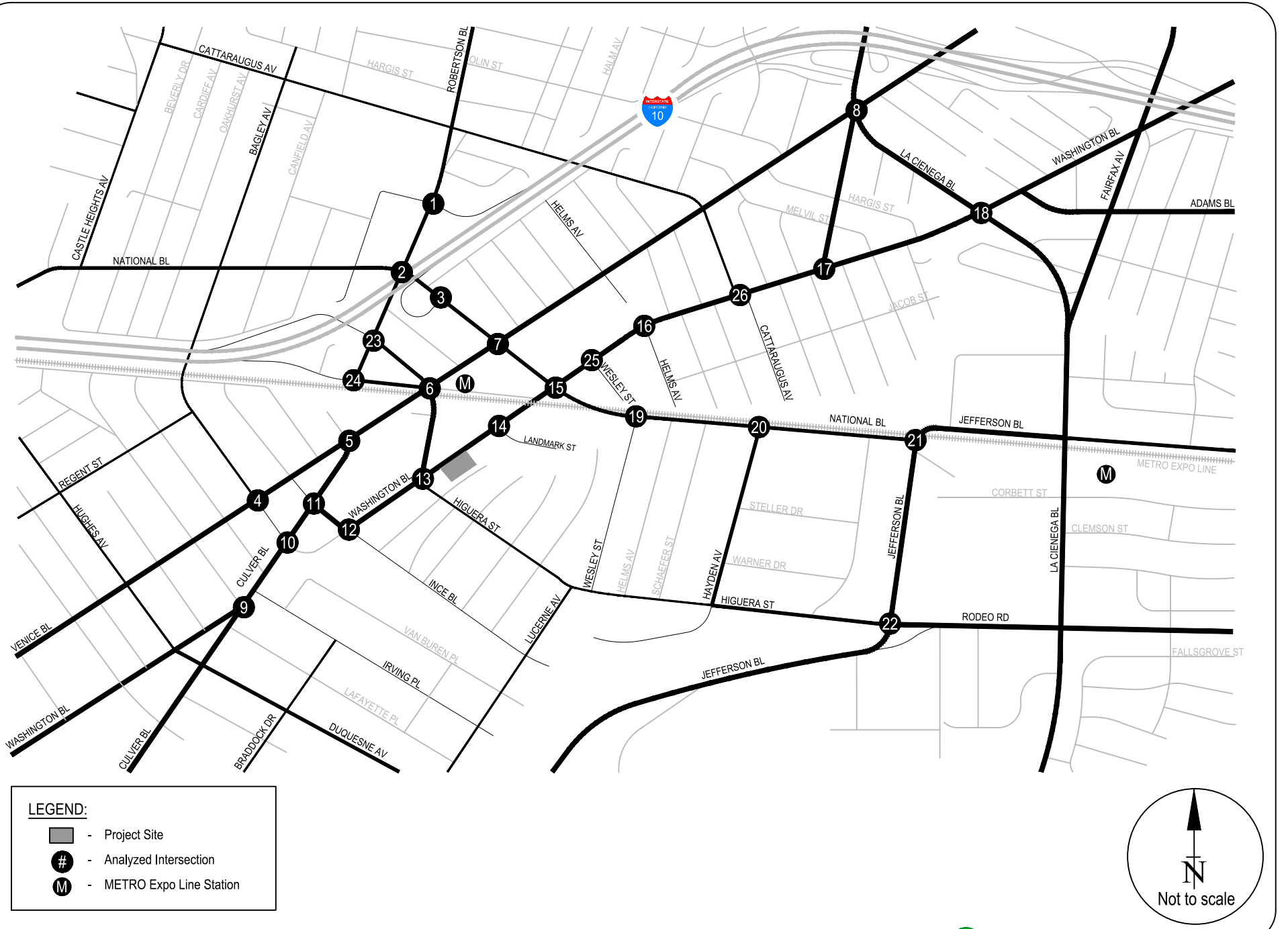
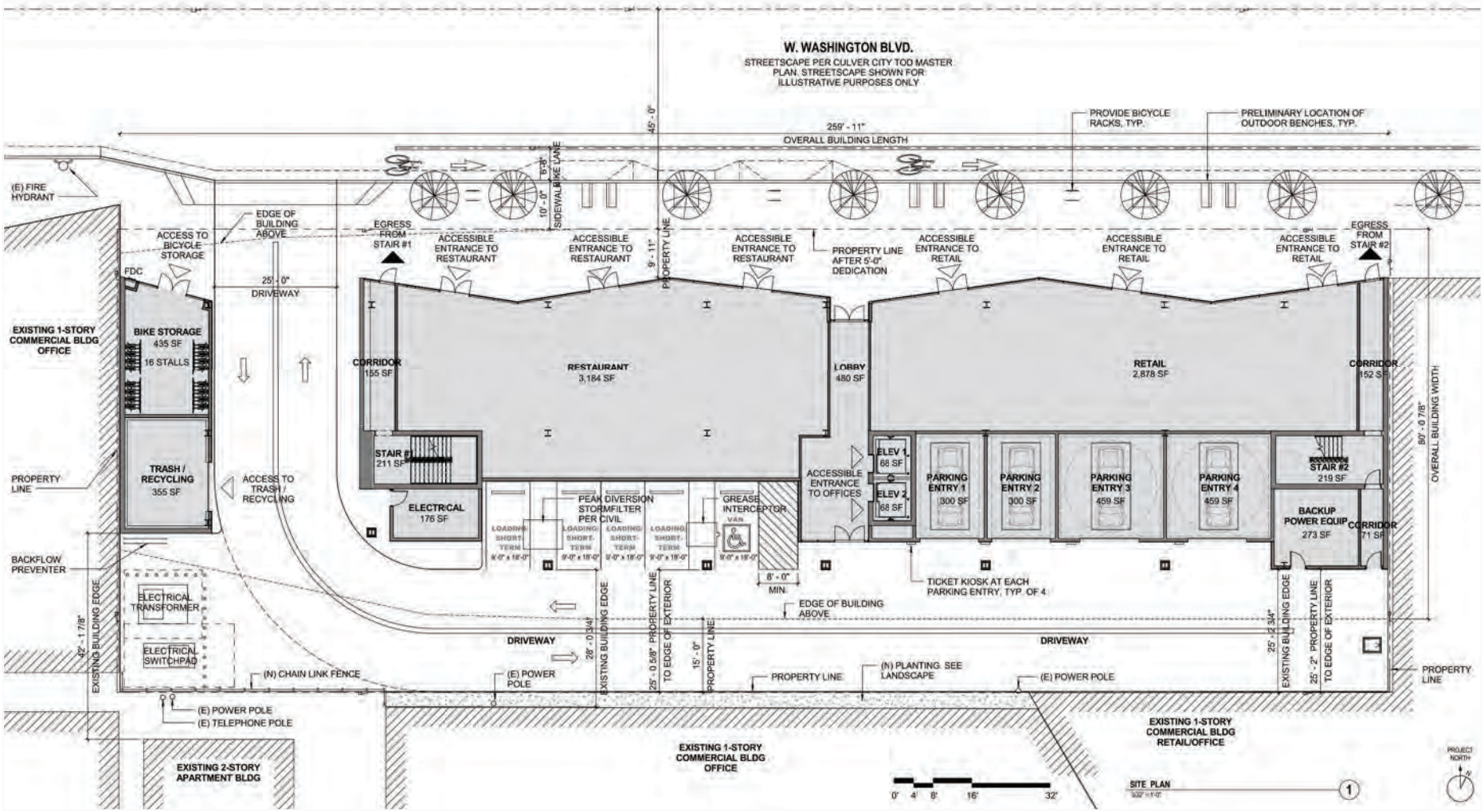


FIGURE 1
LOCATION OF PROJECT AND ANALYZED INERSECTIONS

RAJU Associates, Inc.



SOURCE: ABRAMSON TEIGER ARCHITECTS

N

Not to scale

FIGURE 2
PROJECT SITE PLAN

RAJU Associates, Inc.

STUDY SCOPE

The scope of work for this study was developed in conjunction with the Cities of Culver City and Los Angeles staff. The base assumptions, technical methodologies and geographic coverage of the study were all identified as part of the study approach. The study is directed at the analysis of potential traffic impacts on the street system produced by the Proposed Project per the City of Culver City traffic impact significance criteria. For locations within the City of Los Angeles, the City of Los Angeles traffic impact significance criteria have been used. The scenarios identified below have been evaluated in this study.

- Existing (2016) Conditions - The analysis of existing traffic conditions is intended to provide a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets, traffic volumes, and operating conditions.

- Existing (2016) Plus Project Conditions – The net traffic expected to be generated by the Proposed Project is estimated and added to the Existing (2016) traffic volumes. The impacts of the Proposed Project on existing traffic operating conditions are then identified.

- Cumulative (2018) Base Conditions - Future traffic conditions in the year 2018 without the Proposed Project have been developed. The objective of this analysis is to project future traffic growth and operating conditions, which could be expected to result from regional ambient growth and related projects in the vicinity of the study area by the year 2018.

- Cumulative (2018) Plus Project Conditions – The net traffic expected to be generated by the Proposed Project is estimated and added to the Cumulative (2018) Base traffic forecasts. The impacts of the Proposed Project on future traffic operating conditions are then identified.

As part of this traffic study, a total of 22 signalized intersections and four unsignalized intersections within two jurisdictions have been analyzed. A list of these intersections is presented in Table 1 and their locations are illustrated in Figure 1. Of the 26 study locations, 14 intersections are in the City of Culver City and 12 intersections are in the City of Los Angeles. These study locations were coordinated with the affected jurisdictions as part of the scoping for the study and were analyzed for the scenarios described above.

A detailed Memorandum of Understanding (MOU) was prepared in coordination with the City of Culver City staff. The MOU includes among other details, a description of the Proposed Project, its trip generation and distribution characteristics. A copy of the MOU is attached in Appendix A of this report.

TABLE 1
LIST OF ANALYZED INTERSECTIONS

Int #	Intersection		Jurisdiction	Signalized?
	Northbound/Southbound	Eastbound/Westbound		
1.	Robertson Boulevard	I-10 WB Off-Ramp/Kincardine Avenue	City of Los Angeles	Yes
2.	Robertson Boulevard	National Boulevard	City of Los Angeles	Yes
3.	National Boulevard	I-10 Eastbound On-Ramp	City of Los Angeles	Yes
4.	Bagley Avenue	Venice Boulevard	City of Los Angeles	Yes
5.	Culver Boulevard	Venice Boulevard	City of Los Angeles	Yes
6.	Robertson Boulevard	Venice Boulevard	City of Los Angeles	Yes
7.	National Boulevard	Venice Boulevard	City of Los Angeles	Yes
8.	La Cienega Boulevard	Venice Boulevard [1]	City of Los Angeles	Yes
9.	Culver Boulevard	Washington Boulevard/Irving Place	Culver City	Yes
10.	Main Street	Culver Boulevard	Culver City	Yes
11.	Culver Boulevard	Washington Boulevard	Culver City	Yes
12.	Ince Boulevard	Washington Boulevard	Culver City	Yes
13.	Robertson Boulevard/Higuera Street	Washington Boulevard	Culver City	Yes
14.	Landmark Street	Washington Boulevard	Culver City	Yes
15.	National Boulevard	Washington Boulevard	Culver City	Yes
16.	Helms Avenue	Washington Boulevard	Culver City	Yes
17.	La Cienega Avenue	Washington Boulevard	Culver City	Yes
18.	La Cienega Boulevard	Washington Boulevard	Culver City	Yes
19.	Wesley Street	National Boulevard	Culver City	Yes
20.	Hayden Avenue	National Boulevard	Culver City	Yes
21.	Jefferson Boulevard	National Boulevard	City of Los Angeles	Yes
22.	Jefferson Boulevard	Higuera Street/Rodeo Road	City of Los Angeles	Yes
23.	Robertson Boulevard	I-10 EB On-Ramp	City of Los Angeles	No
24.	Robertson Boulevard	Exposition Bl/I-10 EB Off-Ramp	City of Los Angeles	No
25.	Wesley Street	Washington Boulevard	Culver City	No [2]
26.	Cattaraugus Avenue	Washington Boulevard	Culver City	No

[1] Los Angeles County Congestion Management Program monitoring location.
[2] The intersection will be signalized in the future.

ORGANIZATION OF REPORT

An executive summary presenting key details of the study is provided at the beginning of this report. The rest of the report is divided into seven chapters. Chapter I presents an introduction and provides details of the various elements of the study. Chapter II describes the existing circulation system, traffic volumes, and traffic conditions within the study area. Chapter III describes the development of the Proposed Project's traffic projections. The methodology to develop Future Year 2018 traffic volume forecasts without and with the Proposed Project is described and applied in Chapter IV. Chapter V presents assessment of traffic conditions with and without the project and the potential traffic impacts due to the Proposed Project. Residential street segment analysis, parking, and access/circulation evaluations are presented in Chapter VI. The results of the analysis of the Proposed Project's impacts on the CMP regional transportation system are provided in Chapter VII. A summary of the analysis and study conclusions is included in Chapter VIII. Appendices to this report include details of the technical analyses.

II. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions within the study area. The assessment of conditions relevant to this study includes an inventory of the street system, traffic volumes on these facilities, and operating conditions at key intersections. A detailed description of these elements is presented in this chapter. The existing transit system serving the study area is also described in this chapter.

STUDY AREA

The Project site is located on south side of Washington Boulevard between Robertson Boulevard-Higuera Street and Landmark Street. The San Diego (I-405) Freeway is located approximately two miles west of the Project site and the Santa Monica (I-10) Freeway is located less than a half mile north of the Project site. The study area is bounded by Cattaraugus Avenue on the north, Jefferson Boulevard/Rodeo Road on the south, Hughes Avenue/Duquesne Avenue on the west and La Cienega Boulevard on the east.

EXISTING STREET SYSTEM

The existing street system within the study area consists of a regional highway system, primary arterials, secondary arterials, and neighborhood feeder streets/collectors and local streets. A description of the regional and local access and circulation offered by the various roadways follows.

The San Diego (I-405) and Santa Monica (I-10) Freeways provide the primary regional access to the study area. The key arterials serving the site are Venice Boulevard, National Boulevard, Washington Boulevard, Culver Boulevard, Duquesne Avenue, Robertson Boulevard, Higuera Street, Hayden Avenue, La Cienega Boulevard, Rodeo Road, Jefferson Boulevard, and Fairfax

Avenue. The remaining neighborhood streets (collector and local streets) offer local circulation possibilities. A brief description of these facilities follows.

- Santa Monica (I-10) Freeway – The I-10 Freeway is an east-west freeway that transverses the Southern California region from its western terminus at Pacific Coast Highway in the City of Santa Monica into San Bernardino County and points east. In the vicinity of the study area, this freeway generally provides four lanes in the westbound direction and four lanes in the eastbound direction. There are interchanges at Robertson Boulevard, National Boulevard, La Cienega Boulevard/Venice Boulevard and Washington Boulevard/Fairfax Avenue in the vicinity of the study area. This freeway provides access to the regional interstate system.

- San Diego (I-405) Freeway – The I-405 Freeway is a north-south freeway that transverses the Southern California region from its northern terminus at the I-5 Freeway in Sylmar to its southern terminus at the I-5 Freeway in Irvine. In the vicinity of the study area, this freeway provides six lanes in each direction (including one HOV lane). There are interchanges at Culver Boulevard and Venice Boulevard/Washington Boulevard in the vicinity of the study area. This freeway provides access to the regional interstate system.

- Venice Boulevard – Venice Boulevard is classified as a primary arterial/major highway, within the study area, and traverses in an east-west direction across several jurisdictions. Within the study area, Venice Boulevard generally offers six travel lanes, three lanes in each direction, with left-turn lanes at key intersections and a large raised median island. On-street parking is allowed on both sides of the street throughout the study area. Venice Boulevard provides access to the I-10 (Santa Monica) Freeway.

- Washington Boulevard – Washington Boulevard is classified as a primary arterial roadway within the City of Culver City and a major highway within the City of Los Angeles. It defines the northern frontage of the Project site. Washington Boulevard traverses in an east-west direction across several jurisdictions and generally offers four travel lanes, two lanes per direction, with a central left-turn lane or median. On-street parking is generally allowed along this roadway in the vicinity of the study area.

- Culver Boulevard – Culver Boulevard is a primary arterial within the City of Culver City and a major highway within the City of Los Angeles and traverses diagonally in an east-west direction from Playa del Rey to its terminus at Venice Boulevard. Within the study area, this roadway offers four travel lanes, two lanes per direction, with a raised median and turn lanes at major or key intersections. On-street parking is allowed along this roadway throughout the study area, except at major intersections where turn lanes are provided. Culver Boulevard currently provides access to the I-405 (San Diego) Freeway to and from the north.

- Jefferson Boulevard – Jefferson Boulevard is a primary arterial/major highway west of La Cienega Boulevard and traverses in an east-west direction across several jurisdictions. East of La Cienega Boulevard, Jefferson Boulevard is classified as a secondary highway. Within the study area, this roadway generally provides four travel lanes, two lanes in each direction with a central left-turn lane. On-street parking is generally allowed along this roadway.

- La Cienega Boulevard – La Cienega Boulevard is classified as a primary arterial/major highway and traverses in a north-south direction across several jurisdictions. This roadway offers six travel lanes, three lanes per direction, with a central left-turn median. There is no stopping at any time along the roadway within the study area. This roadway provides access to the I-10 (Santa Monica) Freeway, as well as, the I-405 (San Diego) Freeway to and from the south.

- Fairfax Avenue – Fairfax Avenue is a primary arterial/major highway that traverses in a north-south direction and offers four travel lanes, two lanes per direction, with left-turn lanes at key intersections. On-street parking is generally prohibited along this roadway within the study area. This roadway provides access to the I-10 (Santa Monica) Freeway.

- Rodeo Road – Rodeo Road is classified as a major highway and runs in an east-west direction across the City of Los Angeles. Within the study area, this roadway generally provides six travel lanes during peak commute hours, three lanes in each direction, with a central left-turn median. Restricted on-street parking is generally allowed along this roadway.

- Robertson Boulevard – Within the City of Los Angeles, Robertson Boulevard is classified as a secondary highway. Within Culver City, south of Venice Boulevard, Robertson Boulevard is classified as a primary arterial. This roadway runs in a north-south direction and generally provides four travels lanes, two lanes in each direction. On-street parking is allowed on both sides of the streets within the study area. Some segments of Robertson Boulevard have parking prohibitions and/or restrictions on one or both sides of the street. Robertson Boulevard provides access to the I-10 (Santa Monica) Freeway.

- National Boulevard – National Boulevard is a secondary arterial/highway that runs in an east-west direction. It generally offers two lanes in each direction and provides connection to the I-10 (Santa Monica) Freeway north of the Project site. On-street parking is available along many stretches of this roadway, generally, except at major intersections where turn lanes are provided.

- Duquesne Avenue – Duquesne Avenue is a secondary arterial roadway that traverses in a north-south direction. Within the study area, this roadway offers two travel lanes, one lane per direction. On-street parking is generally allowed on both sides of the street.

- Hayden Avenue – Hayden Avenue is a secondary arterial that traverses in a north-south direction. This roadway offers two travel lanes, one lane in each direction. Between National Boulevard and Higuera Street, on-street parking is generally prohibited or restricted.

- Higuera Street – Higuera Street is classified as a secondary arterial between Hayden Avenue and Jefferson Boulevard and provides four travel lanes, two lanes in each direction. Between Washington Boulevard and Hayden Avenue, Higuera Street is classified as a neighborhood feeder street and provides two travel lanes, one lane per direction. On-street parking is generally allowed along many stretches of this roadway. At the intersection of Hayden Avenue-Hayden Place/Higuera Street, a raised median barrier has been placed to prevent eastbound and westbound through traffic movements. All traffic in either direction along Higuera Street must turn onto Hayden Avenue or Hayden Place.

- Hughes Avenue – Hughes Avenue is classified as a collector street and traverses in a north-south direction. Within the study area, this roadway provides two travel lanes, with one lane in each direction. On-street parking is generally allowed along this roadway throughout the study area. Between Venice Boulevard and Washington Boulevard, on-street parking is prohibited.

- Wesley Street – Wesley Street is a discontinuous local roadway that runs in a north–south direction. One segment of Wesley Street extends south from Washington Boulevard, terminating in a cul-de-sac. The other segment of Wesley Street connects National Boulevard to Higuera Street. This roadway provides two travel lanes, one lane per direction. On-street parking is generally allowed along this roadway within the study area.

- Irving Place – Irving Place is a local roadway that traverses in a north-south direction. North of 'A' Street, the roadway provides one travel lane per direction with metered parking on both sides of the street. South of 'A' Street to its terminus at Lucerne Avenue, the roadway provides one-way northbound circulation. Parking is generally allowed on both sides of the street along this segment.

- Braddock Drive – Braddock Drive is a neighborhood feeder street that runs in a northwest to southeast direction. It provides two travel lanes, one lane per direction. On-street parking is generally allowed on the south side of the street within the study area.

- Landmark Street – Landmark Street is a local roadway that traverses in a north-south direction and adjacent to the Project site. This roadway offers two travel lanes, one lane in each direction, and it is undivided. On-street parking is allowed along this roadway.

- Cattaraugus Avenue – Cattaraugus Avenue is classified as a local roadway within the City of Culver City and is classified as a collector street within the City of Los Angeles. This roadway traverses in a north-south direction and generally offers two travel lanes, with one lane per direction. On-street parking is generally allowed along this roadway.

- Lucerne Avenue - Lucerne Avenue is a neighborhood feeder street that runs in a northwest to southeast direction. It provides two travel lanes, one lane per direction. On-street parking is generally allowed on the south side of the street within the study area.

The existing lane configurations of the analyzed intersections are included in Appendix B.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

The following sections present the existing intersection peak hour traffic volumes, a description of the methodology utilized to analyze the intersection traffic conditions, and the resulting level of service conditions at each of the study intersections.

Existing Traffic Volumes

Weekday morning and evening peak hour traffic counts were compiled from data collected at the analyzed intersections in February, April, September, and October 2015, and March and November 2016. Traffic counts collected in 2015 were factored upward 1% per year to reflect existing 2016 conditions. These traffic volumes reflect typical weekday operations during current year 2016 conditions. The traffic volumes in Figures 3A and 3B represent, for the purposes of this analysis, the Existing 2016 AM and PM peak hour conditions.

The raw data showing the raw traffic counts are attached in Appendix C.

Level of Service Methodology

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the minimum acceptable level of service in urban areas.

The Level of Service definitions for signalized and unsignalized intersections is provided in Table 2 and Table 3, respectively. Twenty-two of the 26 analyzed intersections are controlled by traffic signals and four analyzed intersections are unsignalized.

The Intersection Capacity Utilization (ICU) method was used to determine the intersection V/C ratio and corresponding level of service for City of Culver City study intersections. Per City of Culver City Traffic Study Criteria, a capacity of 1,600 vehicles per lane per hour is assumed, a total of 2,880 vehicles per hour for dual left-turn lanes, and a 10% reduction factor to account for the loss time of the yellow signal clearance periods was utilized in the capacity calculations.

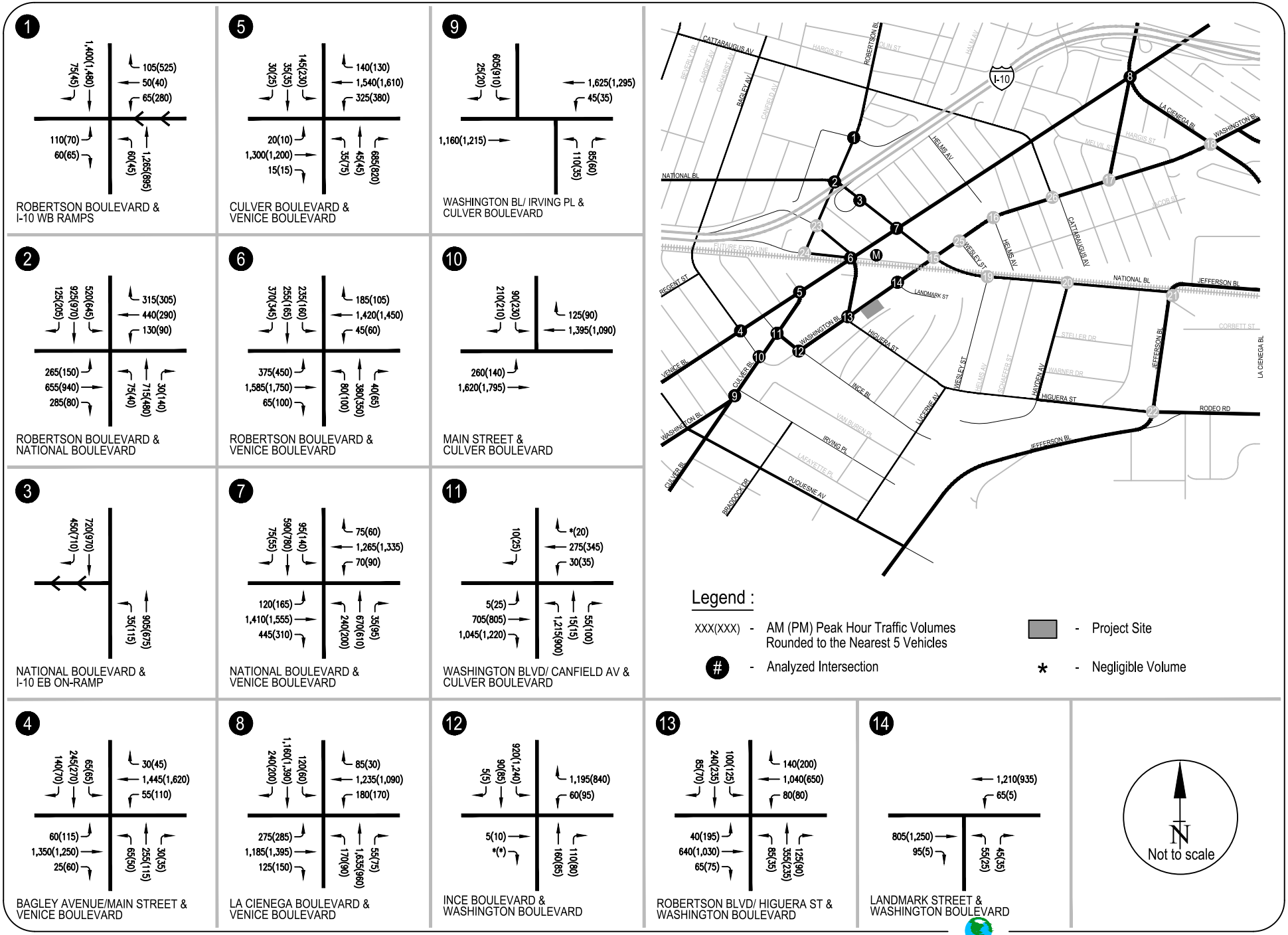


FIGURE 3A
EXISTING (2016) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

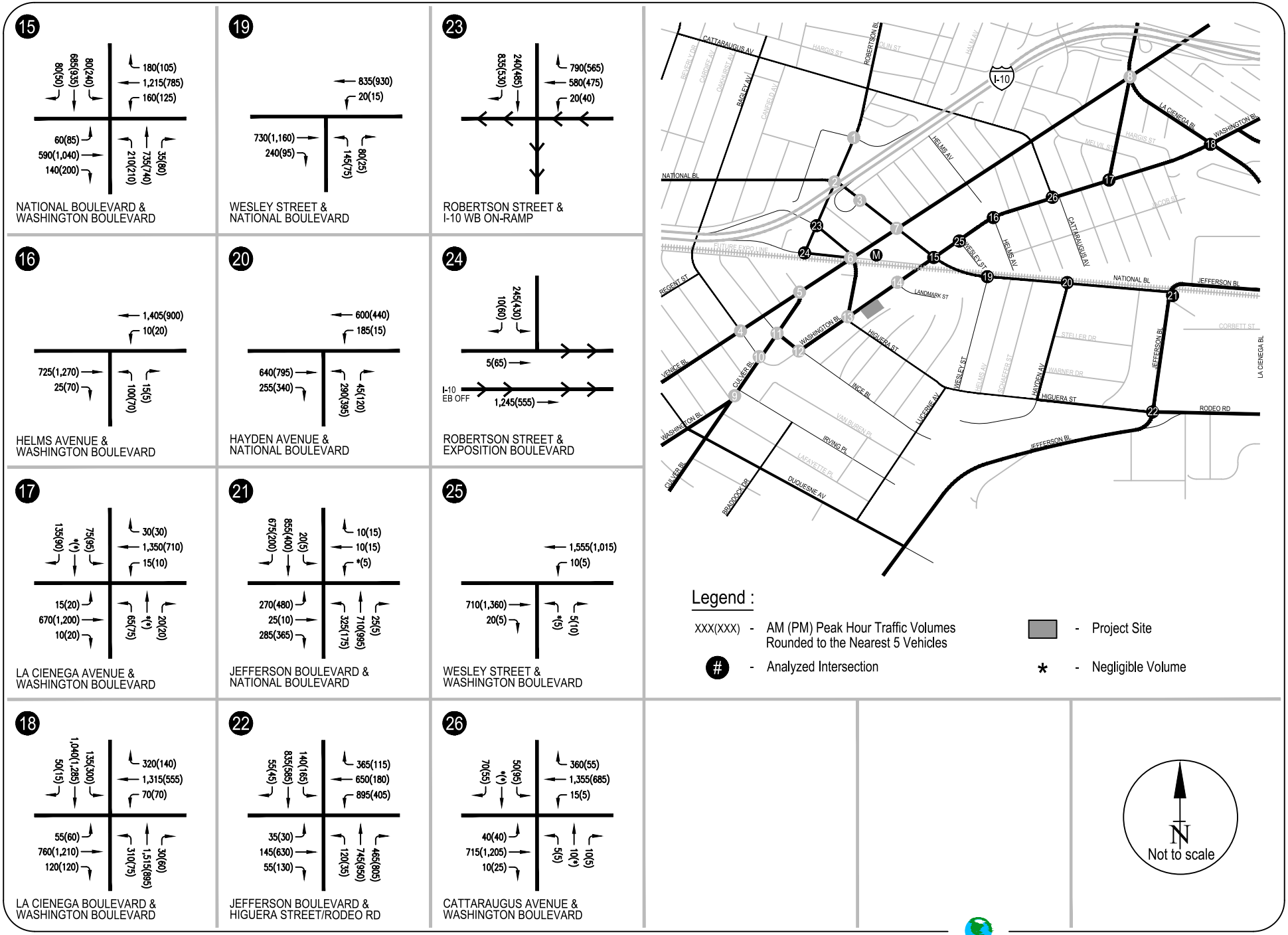


FIGURE 3B
EXISTING (2016) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board, *Transportation Research Circular No. 212, Interim Materials on Highway Capacity* , 1980.

TABLE 3
LEVEL OF SERVICE DEFINITIONS FOR
STOP-CONTROLLED INTERSECTIONS

Level of Service	Average Total Delay (seconds/vehicle)
A	≤ 10.0
B	> 10.0 and ≤ 15.0
C	> 15.0 and ≤ 25.0
D	> 25.0 and ≤ 35.0
E	> 35.0 and ≤ 50.0
F	> 50.0

Source: Transportation Research Board, *Highway Capacity Manual 2010.*

For the City of Los Angeles study locations, the "Critical Movement Analysis-Planning", (Transportation Research Board, 1980) method of intersection capacity analysis was used to determine the intersection volume to capacity (V/C) ratio and corresponding level of service at the signalized intersections. Level of service spreadsheets developed by LADOT were used to implement the CMA (Circular 212 Method) methodology.

The 10 signalized study intersections under City of Los Angeles jurisdiction are currently controlled by the City of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) System and Adaptive Traffic Control System (ATCS). In accordance with LADOT procedures, a capacity increase of 10% (0.07 V/C adjustment for ATSAC and 0.03 V/C adjustment for ATCS) was applied to reflect the benefits of ATSAC/ATCS control at these intersections.

The remaining 12 signalized intersections under the jurisdiction of the City of Culver City currently operate under a signal coordination system similar to ATSAC, but have not yet been upgraded with the ATCS-type operations. Therefore, a capacity increase of 7% (0.07 V/C adjustments) was applied to reflect the benefits of ATSAC-type control at these intersections.

The Highway Capacity Manual (HCM) 2010 method of unsignalized intersection analysis was used to determine the delay (in seconds) and corresponding level of service at the stop-controlled intersections. For all-way stop controlled intersections, the intersection delay is defined as the average delay experienced by drivers at the intersection. For two-way stop-controlled locations, the intersection delay is defined as the worst case delay experienced by drivers at the intersection who must stop or yield to unimpeded major street traffic. This method uses a "gap acceptance" technique to predict driver delay and is applicable to unsignalized intersections where there is potential for difficulty for minor street or stopped traffic to cross the traffic on the major or unimpeded street. Table 3 defines the ranges of delay and corresponding levels of service for unsignalized intersections.

Existing Levels of Service

The existing traffic volumes presented in Figures 3A and 3B for AM and PM peak hours were used in conjunction with the level of service methodologies described above, and the current intersection characteristics illustrated in Appendix B, to determine the existing operating conditions at the analyzed intersections.

Table 4 summarizes the results of the intersection capacity analysis for existing conditions at each of the study intersections in the study area. The table indicates the existing V/C ratio during the morning and evening peak hours and the corresponding LOS at the study intersections. As illustrated in the table, 24 of the 26 study intersections are currently operating at LOS D or better during the morning peak hour. During the evening peak hour, 23 of the 26 study intersection are operating at LOS D or better. The remaining locations are operating at LOS E or F and includes:

- Robertson Boulevard/I-10 Westbound On-Ramp: AM Peak Hour – LOS F
  PM Peak Hour – LOS E
- Wesley Street/Washington Boulevard: PM Peak Hour – LOS E
- Cattaraugus Avenue/Washington Boulevard: AM Peak Hour – LOS F
  PM Peak Hour – LOS E

Capacity calculation worksheets for Existing (2016) conditions are provided in Appendix D of the report.

TABLE 4
EXISTING (2016) INTERSECTION LEVEL OF SERVICE ANALYSIS

No.	Intersection	Existing (2016) Conditions			
		AM Peak Hour		PM Peak Hour	
		V/C or Delay	LOS	V/C or Delay	LOS
1.	Robertson Boulevard & I-10 WB Off-Ramp/Kincardine Avenue [1]	0.588	A	0.839	D
2.	Robertson Boulevard & National Boulevard [1]	0.892	D	0.817	D
3.	National Boulevard & I-10 Eastbound On-Ramp [1]	0.223	A	0.452	A
4.	Bagley Avenue & Venice Boulevard [1]	0.672	B	0.710	C
5.	Culver Boulevard & Venice Boulevard [1]	0.565	A	0.624	B
6.	Robertson Boulevard & Venice Boulevard [1]	0.728	C	0.721	C
7.	National Boulevard & Venice Boulevard [1]	0.707	C	0.792	C
8.	La Cienega Boulevard & Venice Boulevard [1] [2]	0.813	D	0.814	D
9.	Washington Boulevard/Irving Place & Culver Boulevard [3]	0.656	B	0.648	B
10.	Main Street & Culver Boulevard [3]	0.684	B	0.602	B
11.	Washington Boulevard/Canfield Avenue & Culver Boulevard [3]	0.697	B	0.622	B
12.	Ince Boulevard & Washington Boulevard [3]	0.858	D	0.813	D
13.	Robertson Boulevard/Higuera Street & Washington Boulevard [3]	0.710	C	0.649	B
14.	Landmark Street & Washington Boulevard [3]	0.442	A	0.444	A
15.	National Boulevard & Washington Boulevard [3]	0.670	B	0.816	D
16.	Helms Avenue & Washington Boulevard [3]	0.540	A	0.510	A
17.	La Cienega Avenue/McManus Avenue & Washington Boulevard [3]	0.573	A	0.521	A
18.	La Cienega Boulevard & Washington Boulevard [3]	0.898	D	0.840	D
19.	Wesley Street & National Boulevard [3]	0.429	A	0.463	A
20.	Hayden Avenue & National Boulevard [3]	0.461	A	0.468	A
21.	Jefferson Boulevard & National Boulevard [1]	0.875	D	0.514	A
22.	Jefferson Boulevard & Higuera Street/Rodeo Road [1]	0.757	C	0.727	C
23.	Robertson Boulevard & I-10 Westbound On-Ramp [1] [4]	55.2 s	F	41.8 s	E
24.	Robertson Boulevard & Exposition/I-10 Eastbound Off-Ramp [1] [4]	10.4 s	B	14.9 s	B
25.	Wesley Street & Washington Boulevard [3] [5]	22.3 s	C	49.7 s	E
26.	Cattaraugus Avenue & Washington Boulevard [3] [5]	***	F	41.9 s	E

V/C - Volume to Capacity Ratio
LOS - Level of Service

[1] Study intersection is located within the City of Los Angeles.
[2] Los Angeles County Congestion Management Program arterial monitoring location.
[3] Study intersection is located within the City of Culver City.
[4] All-way stop-controlled intersection. LOS based on average vehicular delay in seconds (s).
[5] Stop-controlled on minor approach(es). LOS based on worst case approach delay in seconds (s).
*** - Oversaturated conditions per Highway Capacity Manual 2010 (HCM).

EXISTING TRANSIT SERVICE

Fourteen bus lines operated by four different transportation agencies currently serve the study area. Four bus lines are operated by the Culver City Bus (CC), eight bus lines are operated by the Los Angeles County Metropolitan Transportation Authority (MTA), one bus line is operated by the Santa Monica Big Blue Bus (SM) and one bus line is operated by the Los Angeles Department of Transportation (LADOT CE). Metro (MTA) also operates the Light Rail Line (Expo Line). These transit lines are described below:

- CC Line 1 – Line 1 is a local east/west line that provides service from Venice Beach to West Los Angeles and travels primarily along Washington Boulevard within the study area. This line runs every day, including holidays. The frequency of service during peak commute hours is approximately 10-15 minutes. The western terminus is at the intersection of Windward Avenue and Main Street in Venice. The eastern terminus is at the West Los Angeles Transit Center located at the intersection of Apple Street/Fairfax Avenue in West Los Angeles.

- CC Line 4 – Line 4 is a local north/south line that provides service from the Playa Vista area to West Los Angeles and travels primarily along Jefferson Boulevard, La Cienega Boulevard, and Fairfax Avenue within the study area. This line runs Monday through Friday at a frequency of approximately 25-40 minutes during peak commute hours. No weekend or holiday service is provided. The southern terminus is in the Playa Vista area. The northern terminus is at the West Los Angeles Transit Center located at the intersection of Apple Street/Fairfax Avenue in West Los Angeles.

- Culver City Bus Line 5 – Line 5 is a local east/west line that provides service from the west side of Culver City to Blair Hills on the east side, and travels primarily along Culver Boulevard, Washington Boulevard, Higuera Street, Hayden Avenue, and Rodeo Road within the study area. This line operates only when school is in session, Monday through Friday from 7:15-7:40 AM and from 2:45-4:05 PM. No weekend or holiday service is provided. It provides westbound/eastbound service from the intersection of Elenda Street/Braddock Drive (Culver City Schools) to the intersection of La Cienega Boulevard/Rodeo Road and eastbound only service from Venice High School (at Maplewood Road) to Culver City Schools.

- Culver City Bus Line 7 – Line 7 is a local east/west line that provides service from Marina Del Rey to Culver City and travels primarily along Washington Boulevard, Venice Boulevard, and Culver Boulevard within the study area. This line runs Monday through Friday at a frequency of approximately 30-40 minutes. Service on weekends and holidays is not provided. The western terminus is at Fisherman's Village in Marina Del Rey. The eastern terminus is at the Metro Expo Line Robertson Station in Culver City.

- Metro Line 17 - Line 17 is a local east/west line that provides service from West Los Angeles to Culver City and travels primarily along Robertson Boulevard, National Boulevard, and Washington Boulevard within the study area. This line runs Monday through Friday at a frequency of approximately 30-35 minutes during peak commute hours. Service is not provided on weekends and holidays. The southern terminus is at

the Metro Expo Line Robertson Station in Culver City. The northern terminus is at the Beverly Center in West Los Angeles.

- Metro Line 33 - Line 33 is a local east/west line that provides service from Santa Monica to Downtown Los Angeles and travels primarily along Venice Boulevard within the study area. This line runs every day, including holidays, at a frequency of approximately 6-15 minutes in the northbound direction and 15-20 minutes in the eastbound direction during peak commute hours. The western terminus is at the intersection of Ocean Avenue/Santa Monica Boulevard in Santa Monica. The eastern terminus is at the Patsaouras Transit Plaza (Union Station) in Downtown Los Angeles.

- Metro Line 37 - Line 37 is a local east/west line that provides service from West Los Angeles to Downtown Los Angeles and travels primarily along Adams Boulevard, Washington Boulevard, and Fairfax Avenue within the study area. This line runs every day, including holidays, at a frequency of 5-8 minutes during peak commute hours. The western terminus is at the West Los Angeles Transit Center located at the intersection of Apple Street/Fairfax Avenue in West Los Angeles. The eastern terminus is at the intersection of Beaudry Avenue/1st Street in Downtown Los Angeles.

- Metro Line 38 - Line 38 is a local east/west line that provides service from West Los Angeles to Downtown Los Angeles and travels primarily along Jefferson Boulevard, La Cienega Boulevard, Washington Boulevard, and Fairfax Avenue within the study area. This line runs every day, including holidays, at a frequency of approximately 12-24 minutes during peak commute hours. The western terminus is at the West Los Angeles Transit Center located at the intersection of Apple Street/Fairfax Avenue in West Los Angeles. The eastern terminus is at the intersection of Broadway/Venice Boulevard in Downtown Los Angeles.

- Metro Line 105 - Line 105 is a local southeast/northwest line that provides service from West Hollywood to Vernon and travels primarily along Fairfax Avenue, La Cienega Boulevard, and Rodeo Road within the study area. This line runs every day, including holidays, at a frequency of approximately 10-20 minutes during peak commute hours. The northwestern terminus is at the intersection of San Vicente/Santa Monica Boulevard in West Hollywood. The southeastern terminus is at the intersection of Santa Fe/Vernon Avenue in Vernon.

- Metro Line 217 – Line 217 is a local north/south line that provides service from West Los Angeles to Hollywood and travels primarily along Fairfax Avenue within the study area. This line runs every day, including holidays, at a frequency of approximately 12-20 minutes during peak commute hours. The southern terminus is at the Howard Hughes Center located near the intersection of Sepulveda Boulevard/Centinela Avenue in Fox Hills. The northern terminus is at Vermont/Sunset Metro Station in Hollywood.

- MTA 705 - Line 705 is a northwest/southeast 'Rapid Bus' line that provides service from West Hollywood to Vernon and travels primarily along Fairfax Avenue and Rodeo Road within the study area. This line runs Monday through Friday at a frequency of approximately 10-20 minutes during peak commute hours. No service is provided on weekends or holidays. The northern terminus is at the intersection of San Vicente Boulevard/Santa Monica Boulevard in West Hollywood. The southern terminus is at the intersection of Santa Fe/Vernon Avenue in the Vernon.

- MTA 733 - Line 733 is an east/west 'Rapid Bus' line that provides service from Santa Monica to Downtown Los Angeles and travels primarily along Venice Boulevard within the study area. This line runs Monday through Friday at a frequency of approximately 10-20 minutes during peak commute hours. Service is also provided on weekends and holidays. The western terminus is at the intersection of Ocean Avenue/Arizona Avenue in Santa Monica. The eastern terminus is at the Patsaouras Transit Plaza (Union Station) in Downtown Los Angeles.

- Santa Monica Big Blue Bus Line 17 – Line 17 is a local north/south line that provides service from Westwood to Culver City and travels primarily along Robertson Boulevard, National Boulevard, and Washington Boulevard within the study area. This line runs every day at a frequency of 30-35 minutes during peak commute hours. No holiday service is provided. The northern terminus is at the University of California, Los Angeles (UCLA) in Westwood. The Southern terminus is at the Metro Expo Line Robertson Station in Culver City.

- LADOT Commuter Express Line 437 – Line 437 is a LADOT Commuter Express line that provides service from Downtown Los Angeles to Marina Del Rey and travels primarily along Washington Boulevard and Culver Boulevard within the study area. This line runs Monday through Friday and provides service only during peak commute hours. During the morning peak hours, it runs in the eastbound direction only, from Marina Del Rey to Downtown Los Angeles, with a frequency of approximately 22-24 minutes. During the evening peak hours, it runs in the westbound direction only, from Downtown Los Angeles to Marina Del Rey, with a frequency of approximately 30 minutes. Service is not provided during weekday off-peak hours and on weekends and holidays. The western terminus is at the intersection of Pacific Avenue/Washington Boulevard in Marina Del Rey. The eastern terminus is at the intersection of San Pedro Street/Temple Street in Downtown Los Angeles.

- Metro Expo Line – Expo Line is an east/west light-rail line that provides service from Union Station to Santa Monica with a station in Culver City. This line runs every day, including holidays, at a frequency of approximately 12 minutes during peak commute hours.

These transit lines within the study area are illustrated in Figure 4. It can be observed from Figure 4 that there is a robust transit network serving the study area. Further, the Metro Expo Line Light-Rail Train (LRT) with its station located just east of the Project site at the intersection of National Boulevard/Washington Boulevard provides mass transit connections to the University of Southern California (USC), Downtown Los Angeles, West Los Angeles and Downtown Santa Monica.

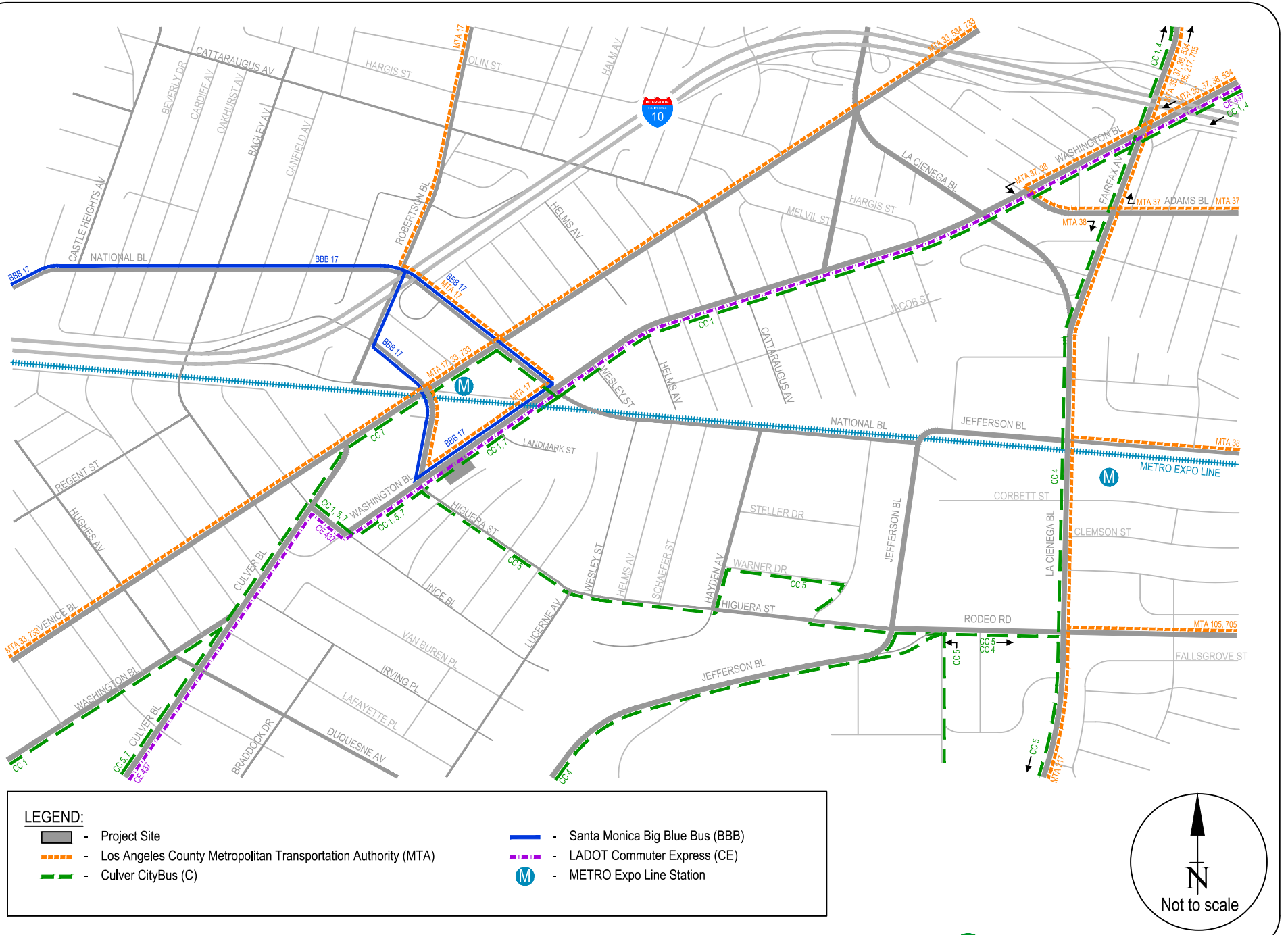


FIGURE 4
EXISTING TRANSIT LINES

RAJU Associates, Inc.

EXISTING BICYCLE FACILITIES

The City of Culver City Bicycle Plan and City of Los Angeles 2010 Bicycle Plan documents the existing and planned bicycle facilities within each respective jurisdiction. Class I Bikeways (Bike Path) provide an exclusive paved right-of-way separated from the street or highway. Class II Bikeways (Bike Lane) provide a striped and signed bike lane for one-way travel on a street or highway. Class III Bikeways (Bike Routes) provide for a shared use of the roadway with posted signage for bicycle use which can include Sharrow pavement markings. In the study area, bicycle facilities are provided on the following roadways:

- Along Expo Line: La Cienega Boulevard to Washington Boulevard (Bike Path)
- Ballona Creek: Jefferson Boulevard to Duquesne Avenue (Bike Path)
- Venice Boulevard: Hughes Avenue to Fairfax Avenue (Bike Lane)
- Jefferson Boulevard: La Cienega Boulevard to La Brea Avenue (Bike Lane)
- Jefferson Boulevard: National Boulevard to Duquesne Avenue (Bike Lane)
- Duquesne Avenue: south of Jefferson Boulevard (Bike Lane)
- Jefferson Boulevard: National Boulevard to La Cienega Boulevard(Bike Route/Sharrows)
- Wesley Street: Higuera Street to National Boulevard (Bike Route/Sharrows)
- Lucerne Avenue: Higuera Street to Duquesne Avenue (Bike Route/Sharrows)
- Higuera Street: Lucerne Avenue to Wesley Street (Bike Route/Sharrows)
- Irving Place: Lucerne Avenue to Culver Boulevard (Bike Route/Sharrows)
- Van Buren Place: A Street to Lucerne Avenue (Bike Route/Sharrows)
- A Street: Irving Place to Van Buren Place (Bike Route/Sharrows)
- Along Expo Line/National Boulevard: La Cienega Boulevard to Washington Boulevard (Bike Path)
- North side of Washington Boulevard between Wesley Street and National Boulevard (Bike Lane). Bike lanes will be installed on the south side of Washington Boulevard between Wesley Street and National Boulevard with the development of 8770 Washington Boulevard project.
- South side of Washington Boulevard between Landmark Street and Expo bridge.
- Bike lanes will be installed on both sides of National Boulevard between Venice Boulevard and Washington Boulevard with the Ivy Station project.

The City of Culver City is preparing a feasibility study to provide a bicycle trail between the Expo Line Station and Downtown Culver City, also known as the Expo-to-Downtown Bicycle Connector. This bikeway would potentially include a two-way protected bike lane with bicycle signalization. This bike trail would be located along the north side of Washington Boulevard between Wesley Street and Robertson Boulevard; and along the south side of Washington Boulevard between Robertson Boulevard and Ince Boulevard. An additional alignment is planned along the west side of Robertson Boulevard between Venice Boulevard and Washington Boulevard. Details on the "Expo to Downtown Bicycle Connector Facility" are attached in Appendix F.

III. PROJECT TRAFFIC PROJECTIONS

In order to properly evaluate the potential impact of the Proposed Project on the local street system, estimates of the Project traffic volumes were developed. The traffic generated by the Proposed Project was estimated and assigned separately to the street system. The addition of Project traffic and existing traffic volumes represents the Existing (2016) plus Project scenario. Traffic projections for future scenarios are described in the next chapter.

PROJECT TRAFFIC VOLUMES

The development of traffic generation estimates for the Proposed Project involves the use of a three-step process: trip generation, trip distribution and traffic assignment.

Project Trip Generation

Implementation of the Proposed Project consists of 59,325 square feet of office use, 2,878 square feet of retail use, and 3,184 square feet of restaurant (high-turnover) use. The existing site contains an auto repair facility with a building size of 9,992 square feet which will be demolished.

Utilizing the ITE's *Trip Generation Manual*, 9th Edition trip rates, the Proposed Project's trip generation was determined. Table 5 presents details of the Proposed Project's trip generation including type of use, size, applicable rate and trip generation estimates. Other calculations within the tables also provide for trip generation reductions from transit trips, internal capture, pass-by trips and existing use trip credit.

From Table 5, it can be observed that the Proposed Project's trip generation would result in a net total of approximately 1,146 daily trips of which 100 trips would occur during the morning peak hour and 124 trips during the evening peak hour.

TABLE 5
ESTIMATED PROJECT TRIP GENERATION

	Size	Daily	AM Peak Hour IN	AM Peak Hour OUT	AM Peak Hour TOTAL	PM Peak Hour IN	PM Peak Hour OUT	PM Peak Hour TOTAL
Proposed Project								
Office	59,325 s.f.	883	111	15	126	25	120	145
	Transit Trip Use (25%)	(221)	(28)	(4)	(32)	(6)	(30)	(36)
	*Internal Capture (10%) Trip Credit	(66)	(8)	(1)	(9)	(2)	(9)	(11)
Retail	2,878 s.f.	677	11	7	18	27	29	56
	Internal Capture (10%) Trip Credit	(68)	(1)	(1)	(2)	(3)	(3)	(6)
	**Pass-By Trip Reduction (25%)	(152)	(3)	(1)	(4)	(6)	(7)	(13)
High-Turnover Restaurant	3,184 s.f.	405	19	15	34	19	12	31
	Internal Capture (10%) Trip Credit	(41)	(2)	(1)	(3)	(2)	(1)	(3)
	**Pass-By Trip Reduction (25%)	(91)	(4)	(4)	(8)	(4)	(3)	(7)
Existing Uses (to be removed)								
Auto Repair Shop	9,992 s.f.	200	15	7	22	17	19	36
	Pass-By Trip Reduction (10%)	(20)	(2)	0	(2)	(2)	(2)	(4)
Project Net Trip Generation Total		**1,146**	**82**	**18**	**100**	**33**	**91**	**124**
Trip Generation Rates [1]								
Office (ITE Land Use 710)	Trips per 1,000 s.f.	[2]	88%	12%	[2]	17%	83%	[2]
Retail/Shopping Center (ITE Land Use 820)	Trips per 1,000 s.f.	[3]	62%	38%	[3]	48%	52%	[3]
High-Turnover Restaurant (ITE Land Use 932)	Trips per 1,000 s.f.	127.15	55%	45%	10.81	60%	40%	9.85
Automobile Care Center (ITE Land Use 942)	Trips per 1,000 s.f.	20.00 [4]	66%	34%	2.25	48%	52%	[5]

* Internal capture trips determined after reduction of transit trips.

** Pass-by trips determined after reduction of internal capture trip credit.

[1] Trip generation rates from *Trip Generation Manual* , 9th Edition, ITE 2012, unless otherwise noted.

[2] Trip generation for office was calculated using the following equations:

Daily:	Ln(T) = 0.76 Ln(X) + 3.68	Where:
AM Peak Hour:	Ln(T) = 0.80 Ln(X) + 1.57	Ln = Natural logarithm
PM Peak Hour:	T = 1.12 (X) + 78.45	T = Two-way volume of traffic (total trip-ends)
		X = Area in 1,000 square feet gross floor area

[3] Trip generation for retail/shopping center was calculated using the following equations:

		Where:
Daily:	Ln(T) = 0.65 Ln(X) + 5.83	Ln = Natural logarithm
AM Peak Hour:	Ln(T) = 0.61 Ln(X) + 2.24	T = Two-way volume of traffic (total trip-ends)
PM Peak Hour:	Ln(T) = 0.67 Ln(X) + 3.31	X = 1,000 square feet gross leasable area

[4] ITE does not provide a daily trip generation rate for this use. Therefore, the daily trip rate for this use from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* , SANDAG, April 2002 was utilized.

[5] PM trip generation for automobile care center was calculated using the following equation:

		Where:
PM Peak Hour:	T = 2.41 (X) + 11.79	T = Two-way volume of traffic (total trip-ends)
		X = 1,000 square feet occupied gross leasable area

Project Trip Distribution

The geographic distribution for Project trips was assumed to be the following:

- To and From the North: 20%
- To and From the South: 15%
- To and From the East: 35%
- To and From the West: 30%

Intersection level trip distribution percentages are shown in Figure 5. Based on these distribution assumptions, location and points of access of the project driveways, and trip generation estimates from the Proposed Project, traffic estimates of project-only trips were developed. These project-only trips are presented in Figures 6A and 6B.

EXISTING (2016) PLUS PROJECT TRAFFIC VOLUMES

Utilizing the project-only traffic estimates developed for both AM and PM peak hours, traffic forecasts for the Existing (2016) plus Project conditions were developed. The existing (2016) traffic volumes were combined with the project-only traffic volumes to obtain the Existing with Project traffic volume forecasts. The Existing (2016) plus Project traffic volumes during both AM and PM peak hours are presented in Figures 7A and 7B.

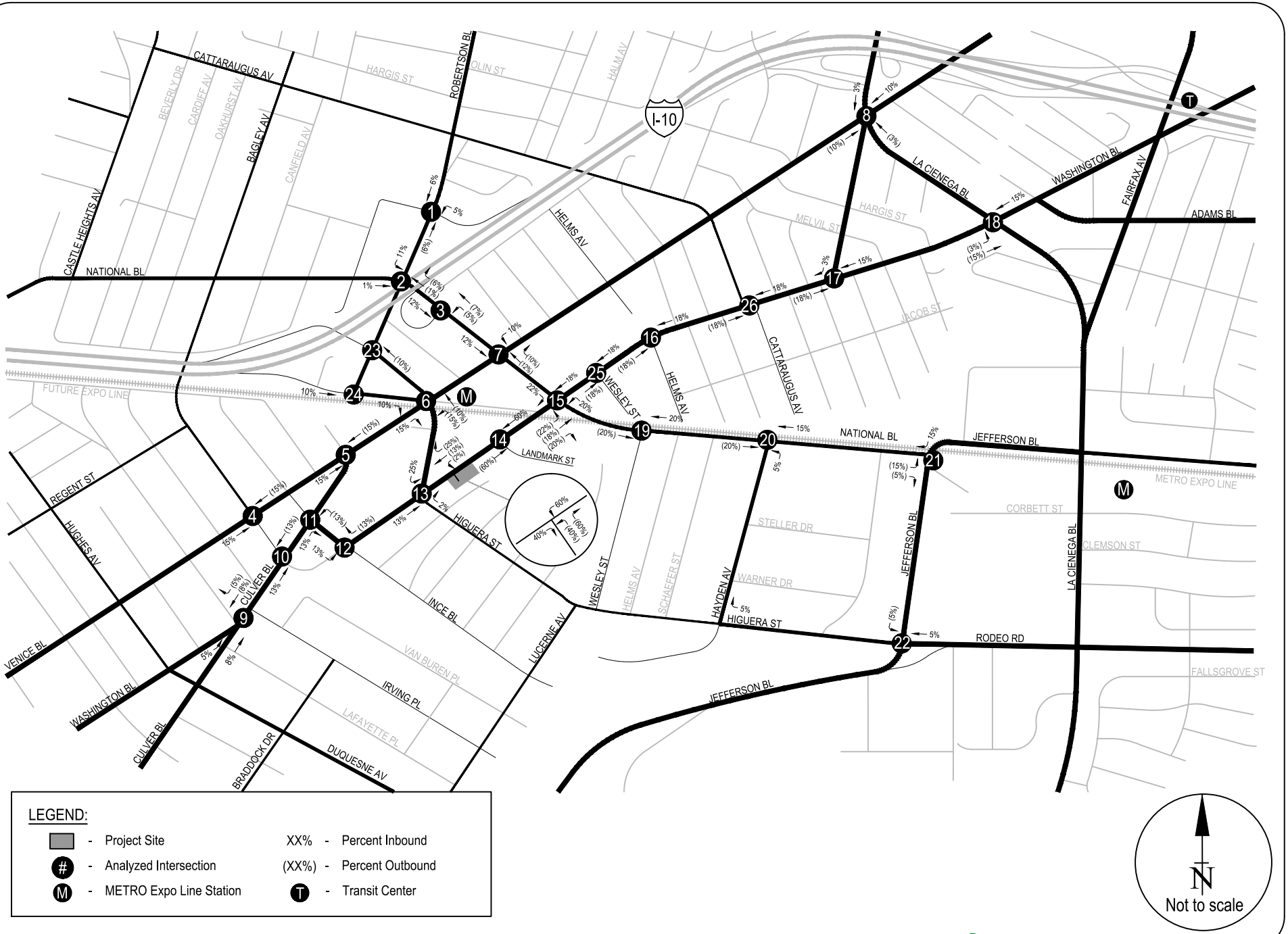


FIGURE 5
PROJECT TRIP DISTRIBUTION

RAJU Associates, Inc.

FIGURE 6A
PROJECT ONLY - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

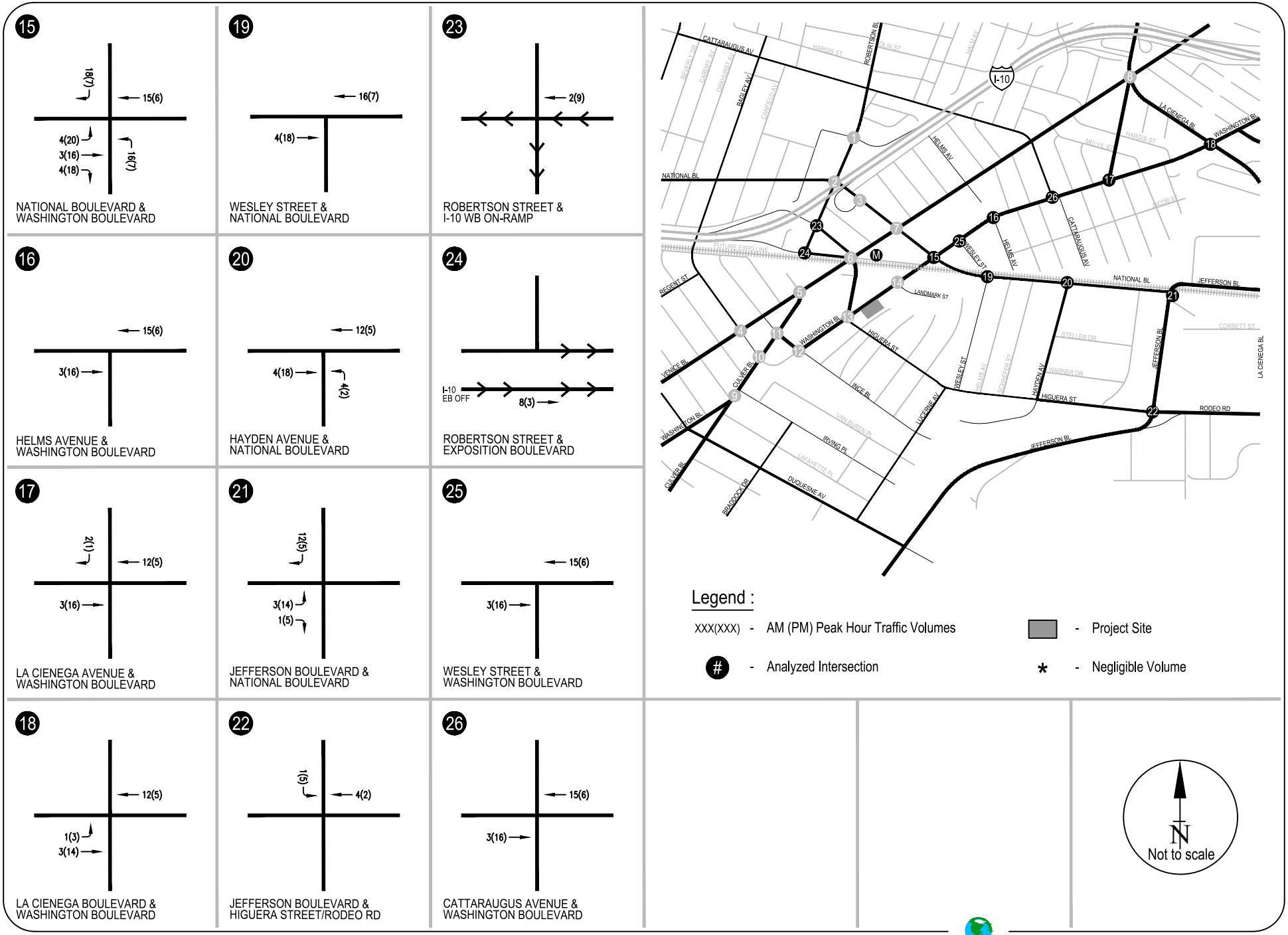


FIGURE 6B
PROJECT ONLY - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

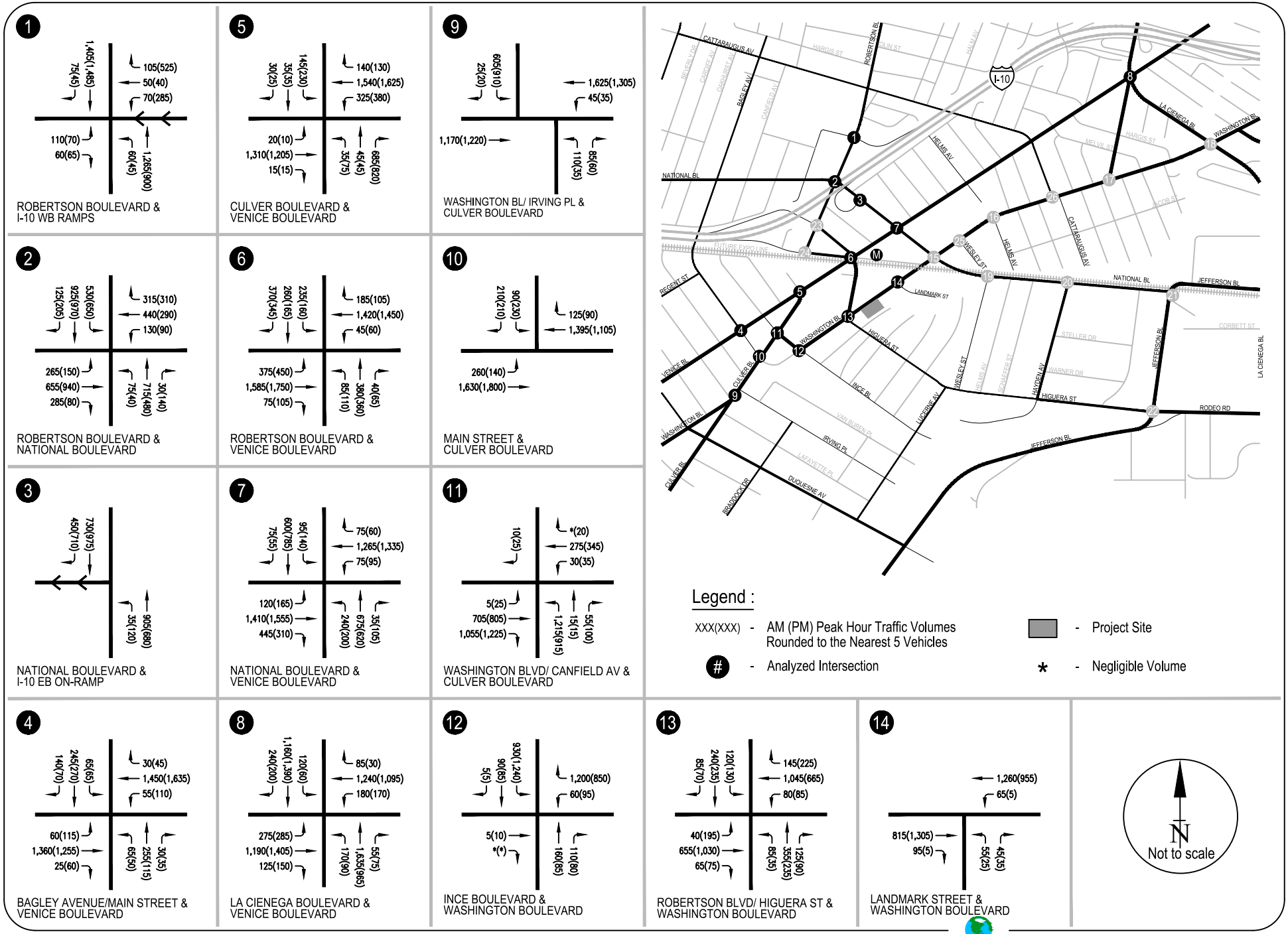


FIGURE 7A
EXISTING (2016) PLUS PROJECT CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

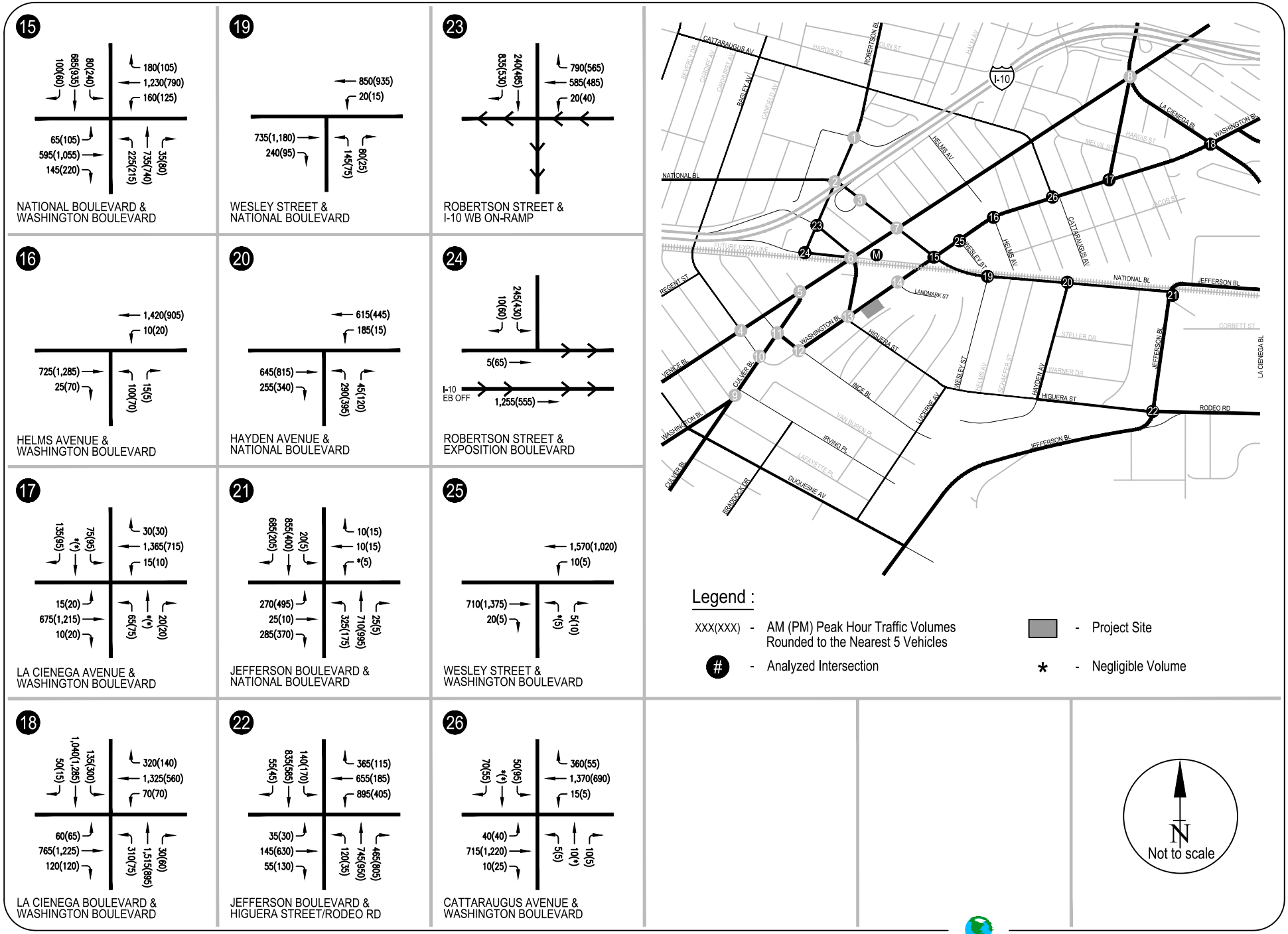


FIGURE 7B
EXISTING (2016) PLUS PROJECT CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

IV. FUTURE YEAR 2018 TRAFFIC PROJECTIONS

In order to properly evaluate the potential impact of the Proposed Project on the local street system, estimates of the Future Year 2018 traffic volumes both with and without the Project were developed. The Future Year 2018 without the Project was first developed including estimates for background growth in area-wide trip making and trips generated by future developments (related projects) in the vicinity of the study area. The Future (2018) without Project traffic represents the cumulative base conditions. Next, the traffic generated by the Proposed Project was estimated and assigned separately to the street system. The addition of Project traffic and the cumulative base traffic volumes provides traffic volume estimates for the Future Cumulative (2018) plus Project scenario. Each of these future traffic scenarios is described further in this chapter.

CUMULATIVE (2018) BASE TRAFFIC PROJECTIONS

The Cumulative (2018) Base traffic projections reflect growth in traffic from two primary sources: Firstly, the background or ambient growth to reflect the effects of overall area-wide regional growth both within and outside the study area; and secondly, from traffic generated by specific related (cumulative) projects located within, or in the vicinity of, the study area. Each of these components is described below.

Area-wide Ambient Traffic Growth

The traffic in the vicinity of the study area was estimated to increase at a rate of about 1.0% per year per the Memorandum of Understanding. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate. With the assumed completion date of 2018, the Existing 2016 traffic volumes were adjusted upward by a factor of 2% to reflect this area-wide regional growth. The resulting Existing plus Ambient Growth (2018) traffic volumes are illustrated in Figures 8A and 8B.

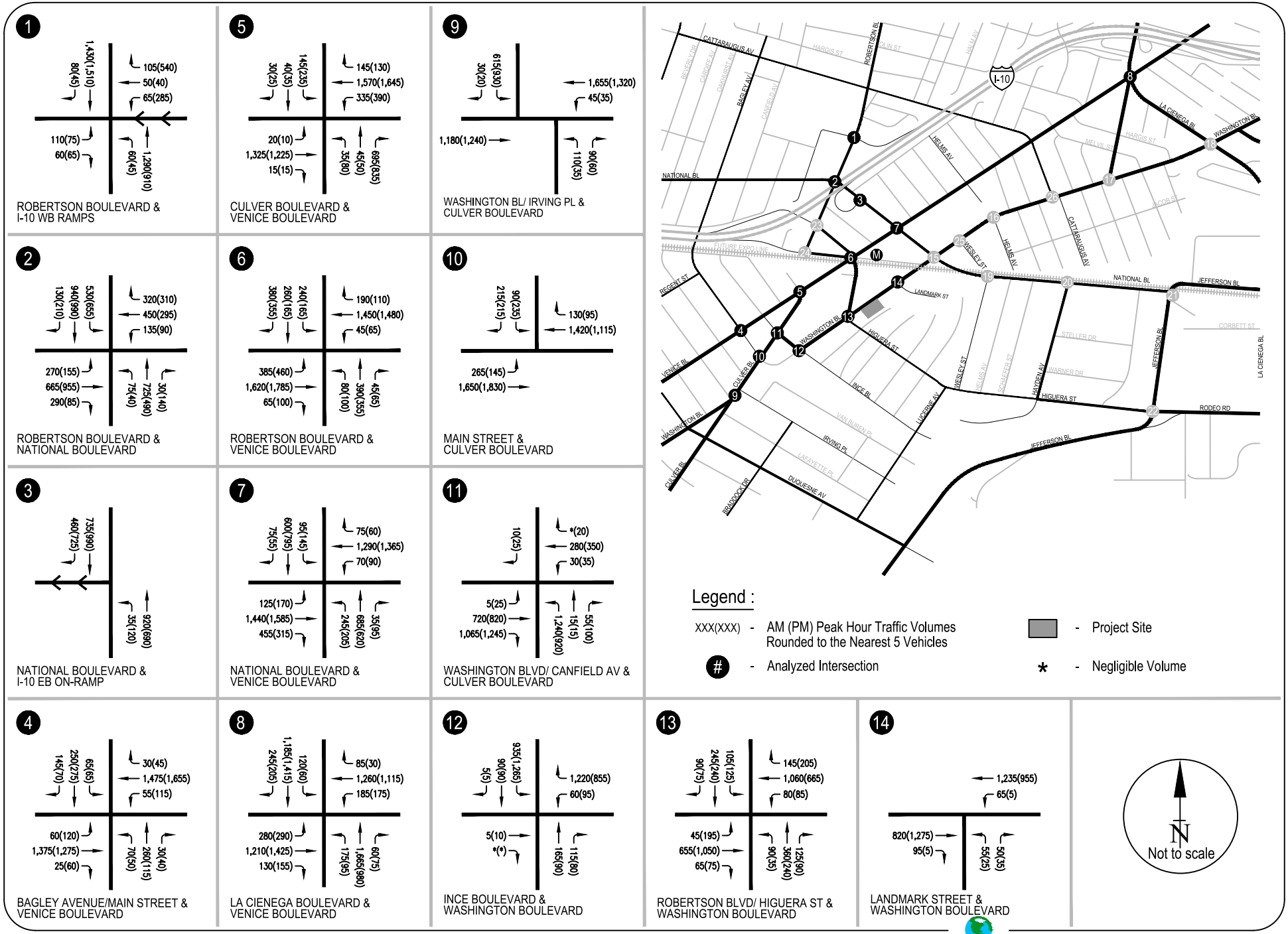


FIGURE 8A
EXISTING WITH AMBIENT GROWTH (2018) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

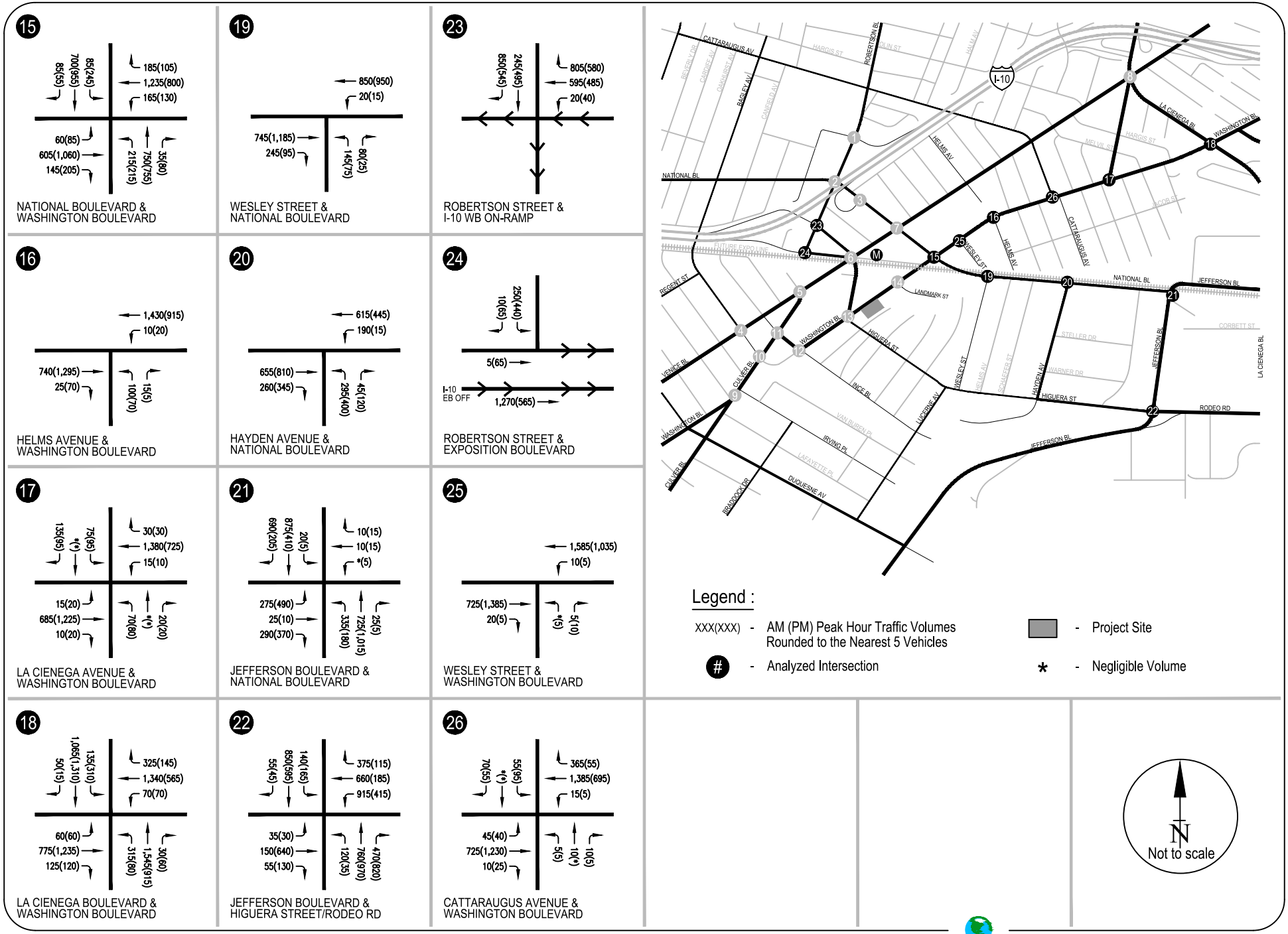


FIGURE 8B
EXISTING WITH AMBIENT GROWTH (2018) CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

Related Projects Traffic Generation and Assignment

As indicated, the second potential source of traffic growth in the study area is that expected from other future development projects in the vicinity. These related or "cumulative" projects are those developments that are planned and expected to be in place within the same timeframe as the Proposed Project. Data describing related projects in the area was solicited from the City of Culver City and the City of Los Angeles. Thirty-three (33) related projects were identified within the study area and are listed in Table 6. The locations of these projects are shown in Figure 9.

The trip generation estimates for the related projects were based on different sources including trip generation rates contained in the ITE's *Trip Generation Manual*, 9th Edition, trip generation estimates provided by the recently completed traffic studies for projects in Culver City, and trip generation estimates for the related projects within the City of Los Angeles provided by the City of Los Angeles Department of Transportation. The trip generation estimates for the related projects are shown in Table 6. As summarized in Table 6, the related projects are expected to generate approximately 3,621 trips during the morning peak hour and 4,197 trips during the evening peak hour. The geographic distribution and the traffic assignment of the related projects were performed and the results are shown in Figures 10A and 10B.

Cumulative (2018) Base Traffic Volumes

The related projects' traffic estimates were added to the Existing plus Ambient Growth traffic to obtain the Cumulative (2018) Base traffic volumes. Figures 11A and 11B provides the Cumulative (2018) Base traffic volumes at each of the analysis intersections during both AM and PM peak hours. These volumes represent Future (2018) Cumulative Base (without project) conditions.

CUMULATIVE (2018) PLUS PROJECT TRAFFIC VOLUMES

Utilizing the project-only traffic estimates developed for both AM and PM peak hours, traffic forecasts for the Future Year 2018 plus Project conditions were developed. The Cumulative (2018) Base traffic forecasts were combined with the project-only traffic volumes to obtain the Future with Project traffic volume forecasts. The Future Year 2018 Cumulative plus Project traffic volumes during both AM and PM peak hours are presented in Figures 12A and 12B.

TABLE 6
ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS

Map No.	Project Name	Location	Description	Daily	AM Peak Hour			PM Peak Hour		
					IN	OUT	TOTAL	IN	OUT	TOTAL
City of Culver City [1]										
1	Residential Project	3440 Caroline Avenue	Two (2) new detached residential condominium dwelling units (net addition of one unit)	6	0	0	0	1	0	1
2	Mixed-Use Project	9355 Culver Boulevard	Three story mixed use building consisting of a ground level salon, mezzanine, and office totaling 2,947 s.f., and four residential units on the third floor.	89	4	2	6	3	5	8
3	The Wende Museum	10808 Culver Boulevard	Tenant improvements to convert existing 12,596 s.f. armory building into a museum	57	4	1	5	0	8	8
4	Chapel/Dormitory Project	10775 Deshire Place	4,740 s.f. addition to existing dormitory and replace existing chapel with a 1,660 s.f. chapel.	82	2	4	6	4	3	7
5	Residential Project	4109-4111 Duquesne Avenue	Addition of two (2) residential dwelling units to existing duplex	12	0	1	1	1	0	1
6	Residential Project	4139-4145 Duquesne Avenue	Seven unit condominiums with 15 subterranean parking spaces.	41	1	2	3	3	1	4
7	Residential Project	4058 Madison Avenue	New four unit condominium, 7,422 s.f. total.	41	1	2	3	3	1	4
8	Retail/Restaurant Project	8511 Warner Drive	Five level parking structure with retail/restaurant. 51,520 s.f. of retail/restaurant uses. Parking Structure -307,522 s.f.	3,112	93	70	163	109	103	212
9	Mixed-Use Project [2]	8770 Washington Boulevard	TOD Mixed Use with 31,240 s.f. of retail and restaurant uses and 115 residential units (5 story)	2,914	69	85	154	150	125	275
10	Platform Project [3]	8810-8850 Washington Boulevard & 3920 Landmark Street	New commercial development (38,732 s.f. office, 41,745 s.f. of retail and restaurant)	2,357	71	20	91	100	100	200
11	Mixed-Use Project	8777 Washington Boulevard	Construct 4,500 s.f. of retail and 128,000 s.f. of office use. Demolish existing 12,485 s.f. of retail use and 4,731 s.f. of restaurant use.	30	123	-3	120	-23	92	69
12	Triangle Site - Washington/National TOD [4]	Corner of Washington Boulevard/National Boulevard	Transit oriented development to include 200 d.u, mid-rise apartments, 148-room hotel, 201,000 s.f. office, 24,000 s.f. specialty retail, 10,000 s.f. of high-turnover restaurant & 10,000 s.f. quality restaurant.	4,124	173	83	256	127	174	301
13	The Culver Studios [5]	9336 Washington Boulevard	Net increase of 138,997 s.f. of office and support facilities.	1,564	149	20	169	45	114	159
14	Office & Retail Project	10000 Washington Boulevard	Renovation of existing 9-story office building. Convert ground floor lobby space to office, retail and restaurant space. New construction includes a new stand-alone 3,115 sq. ft. one-story restaurant building and a second floor within the atrium to add 5,500 sq. ft. of office space.	3,612	136	81	217	102	112	214
15	Sony Pictures	10202 Washington Boulevard	New 8-story, 218,450 s.f. office building, a new 4-story, 51,716 s.f. Production Services support building, and expansion of an existing parking structure. Total demolition of 57,642 s.f. Net New square feet is 212,524 s.f.	2,328	308	42	350	54	262	316
16	Sony Pictures	10202 Washington Boulevard	New 22,929 s.f. 4- story office building (net new 9,875 s.f.).	109	13	2	15	3	12	15
17	Union 76	10638 Culver Boulevard	Gas station and convenience store; 2,676 G.S.F.	651	21	20	41	9	45	54
18	Willows School Comprehensive Plan	809 Higuera & 8476 Warner	Phase II & III - increase student enrollment by 100, from 475 to 575	276	50	40	90	3	15	18
19	Culver Center Shopping Center - New restaurant	10799 Washington Blvd	New 2,000 sq. ft. restaurant at existing commercial shopping center	254	12	10	22	12	8	20
20	Parcel B [5]	9300 Culver Blvd	118,000 G.S.F. of office, retail, and restaurant space.	3,702	124	31	155	167	188	355
21	Three unit condominium/ townhome Redevelopment	4241 Duquesne Avenue	New three detached condominium/ townhomes, resulting in two net new residential dwelling units	17	0	1	1	1	1	2
22	Office Building	9919 Jefferson Blvd	New 3-story, 62,558 sq. ft., office and research and development (laboratory) building, as well as a five (5) level parking structure containing 398 parking spaces, and associated site improvements	919	115	16	131	25	124	149
23	Lorcan O'Herlihy Architects	3434 Wesley St	New TOD Mixed Use project with 15 dwelling units, and 14,237sq. ft. of office/gallery on a vacant lot.	278	16	9	25	16	20	36
City of Los Angeles [6]										
24	Apartment [7]	3822 S. Dunn Drive	7-story, 86-Unit Apartment building over ground floor	543	8	34	42	33	17	50
25	Wrapper Office Building Project	5790 W. Jefferson Boulevard	Construct new 10-story 150,761 s.f. office building	1,794	234	32	266	42	205	247
26	Jefferson & La Cienega Mixed Use Project [8]	3221 S. La Cienega Boulevard	Converting existing ABC Lot to a Mixed-Use: 1,218-Unit Apartment, 200,000 s.f. Office, 50,000 s.f. Grocery Store, 30,000 s.f. Retail & 20,000 s.f. Restaurant project.	10,136	319	419	738	467	382	849
27	Mixed-use Apartment & Retail	3425 Motor Avenue	115-unit apartment and 975 s.f. retail. Existing 15 apartment units, 2 single family dwellings and 3,300 s.f. office to be demolished.	999	12	43	55	58	35	93
28	Restaurant & Retail [7]	10612 National Blvd	1,726 s.f. Coffee Shop (Coffee Bean) including 250 s.f. Outdoor Seating. Existing vacant lot.	636	46	38	84	19	12	31
29	Mixed-Use: Apartment & Restaurant [7]	3644 S. Overland Avenue	New Mixed-Use: 92-Unit Apartment & 1,573 sf Restaurant use (110 spaces).	750	17	42	59	38	22	60
30	Venice Fairfax Residential Project	5930 W. Sawyer Street	Construct 60 single-family homes	656	13	39	52	42	24	66
31	Coffee Shop with Drive Through [7]	9829 W. Venice Boulevard	Coffee Bean & Tea Leaf Coffee Shop with Single-Lane Drive Through to replace existing Rally's with Dual-Lane Drive Through.	145	13	12	25	3	2	5
32	Mixed-use Apartment & Retail	9901 Washington Boulevard	131-unit apartment & 12,000 s.f. retail. Existing 16,900 s.f. retail to be removed.	507	8	50	58	42	12	54
33	Mixed-use Apartment, office, retail, and restaurant	10601 Washington Boulevard	126-unit apartment, 23,000 s.f. office, 9,000 s.f. retail, 9,000 s.f. restaurant. Existing 10,000 s.f. office to be removed.	3,595	106	112	218	170	144	314
			RELATED PROJECTS TRIP GENERATION TOTAL	46,336	2,261	1,360	3,621	1,829	2,368	4,197

* Trip generation estimates are based on trip generation rates included in *Trip Generation Manual*, 9th Edition, ITE 2012, unless noted otherwise.

[1] Source: Culver City Planning Division Active Projects List - January 29, 2016.

[2] Trip generation from *Traffic Impact Analysis Report, Proposed Mixed-Use Development (115-Unit Residential and 31,240 Square Foot Retail) Located at 8770 Washington Boulevard in Culver City, California*, Hirsch/Green Transportation Consulting, Inc., July 2010.

[3] Trip generation from *Traffic Study for the Platform at Culver Station Project, Raju Associates* Inc., July 2011.

[4] Trip generation estimates provided by the City of Culver City.

[5] Trip generation from *Culver Studios Modified Comprehensive Plan Update #6, Transportation Analysis Report*, Fehr & Peers, September 2015.

[6] Source: Los Angeles Department of Transportation.

[7] Trip generation totals provided by LADOT, February 2011. Directional distribution based on *Trip Generation Manual,* 9th Edition, ITE 2012.

[8] Trip generation from *Traffic Study for the Jefferson & La Cienega Mixed-Use Development*, Gibson Consulting, Inc., June 2015.

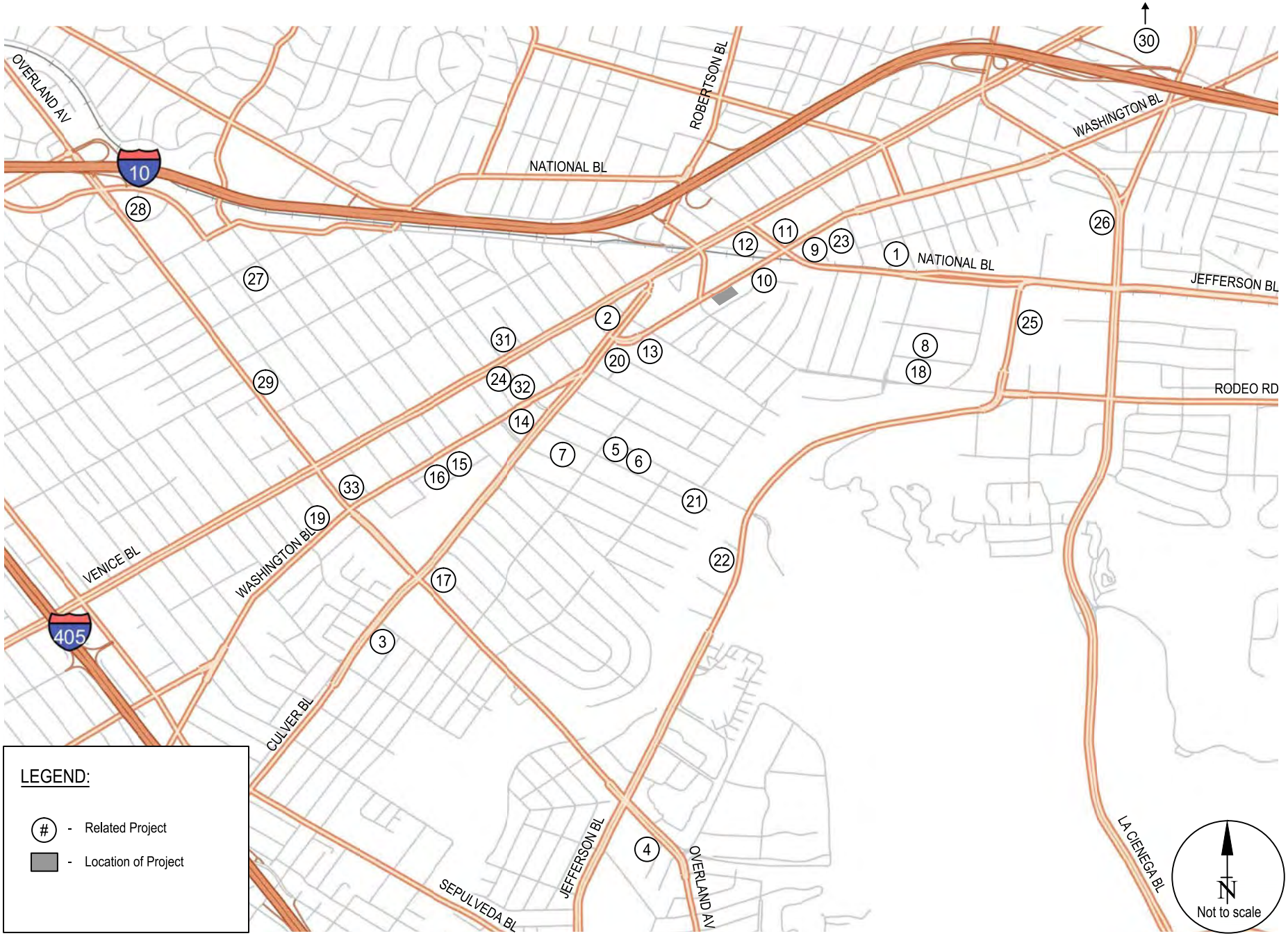


FIGURE 9
LOCATION OF RELATED PROJECTS

RAJU Associates, Inc.

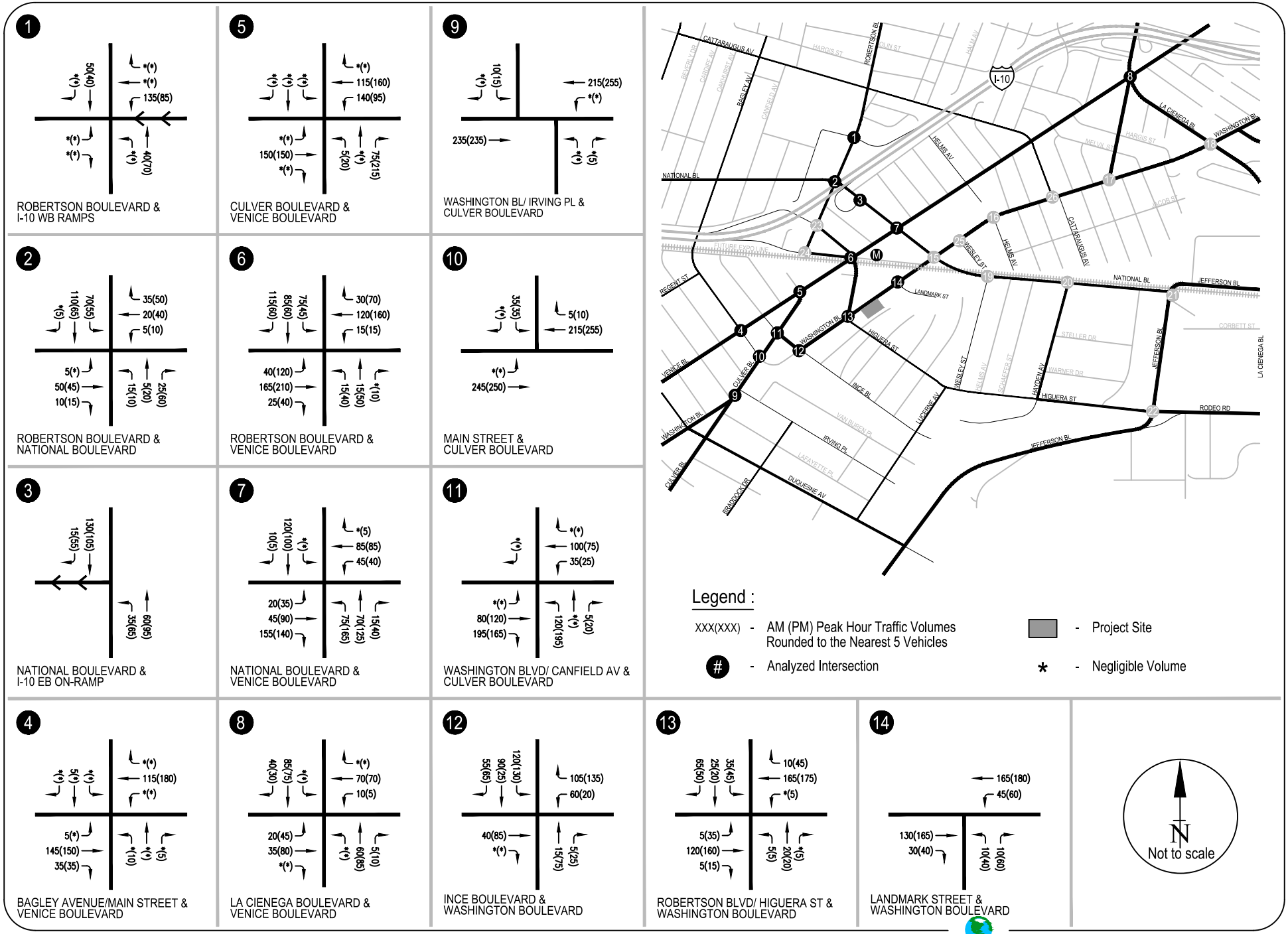


FIGURE 10A
RELATED PROJECTS ONLY - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

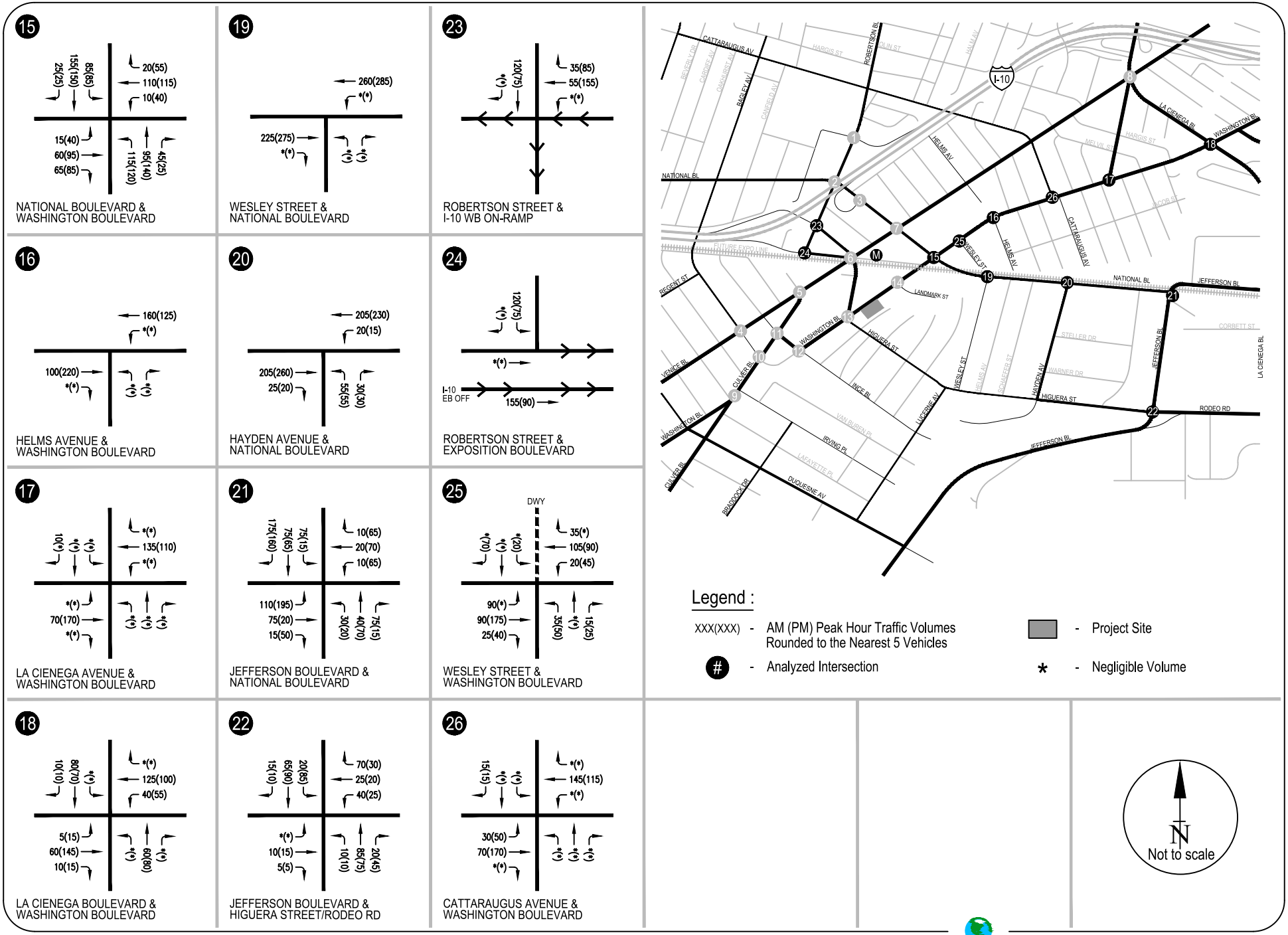


FIGURE 10B
RELATED PROJECTS ONLY - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

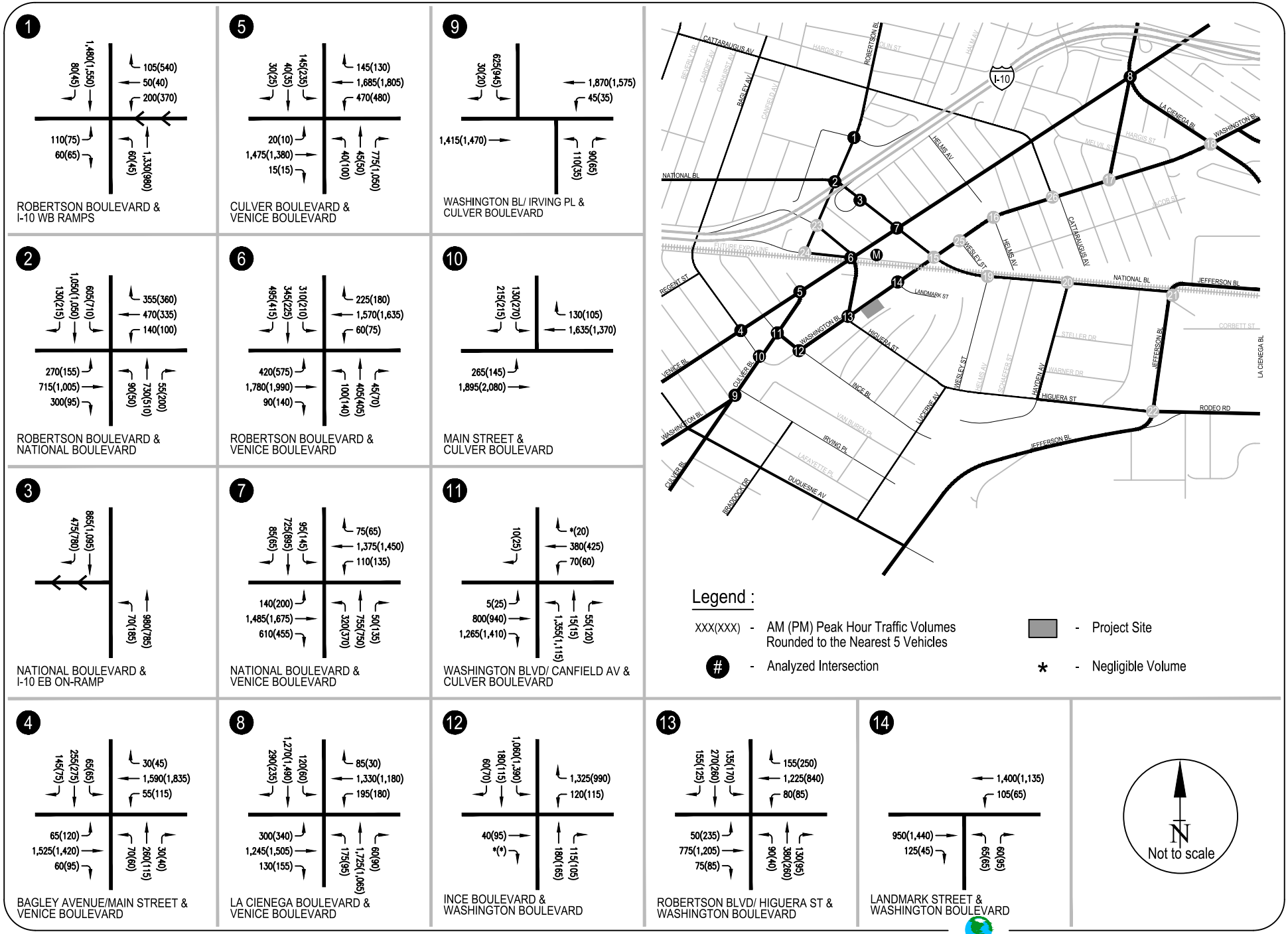


FIGURE 11A
CUMULATIVE (2018) BASE CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

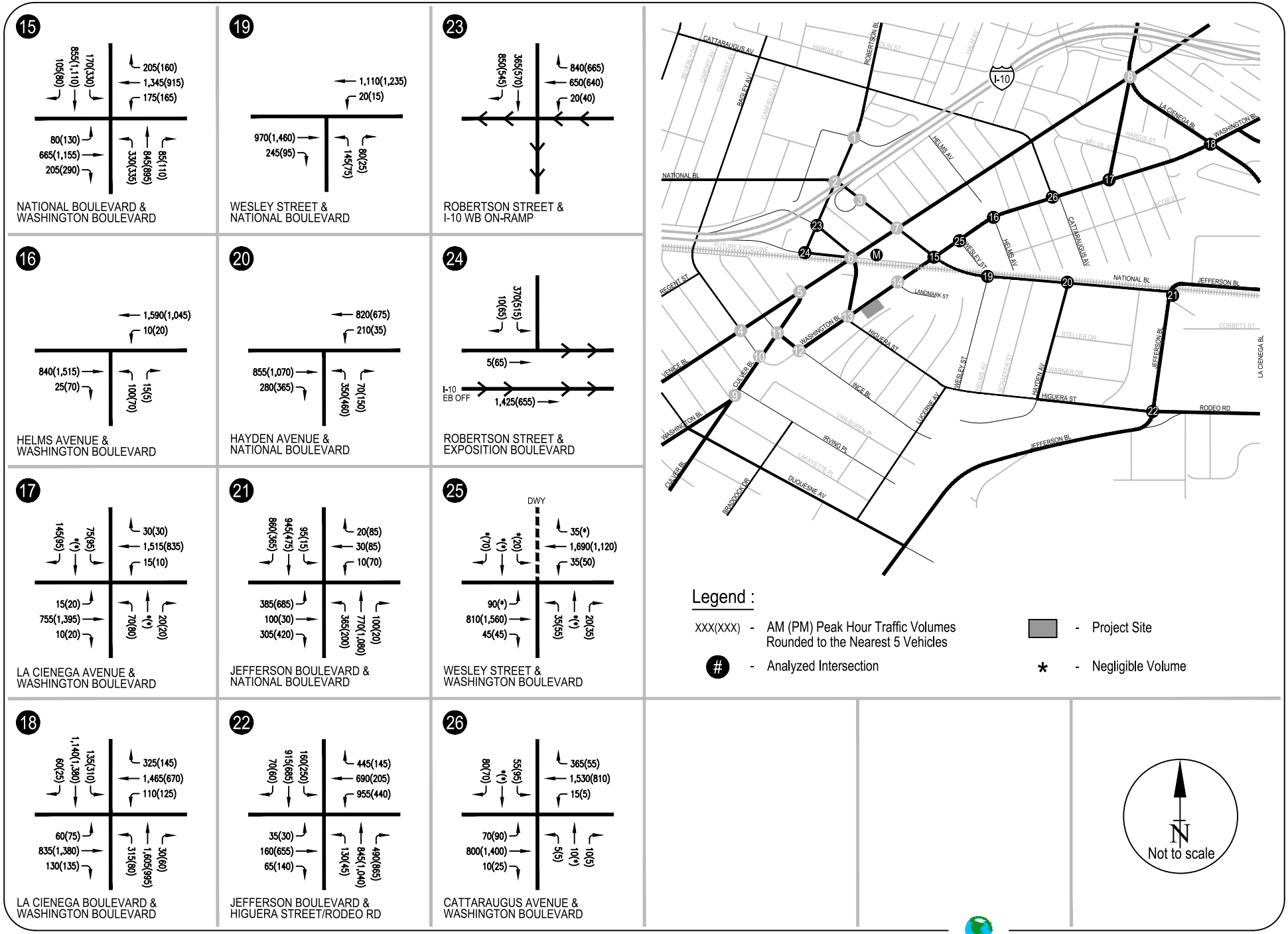


FIGURE 11B
CUMULATIVE (2018) BASE CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

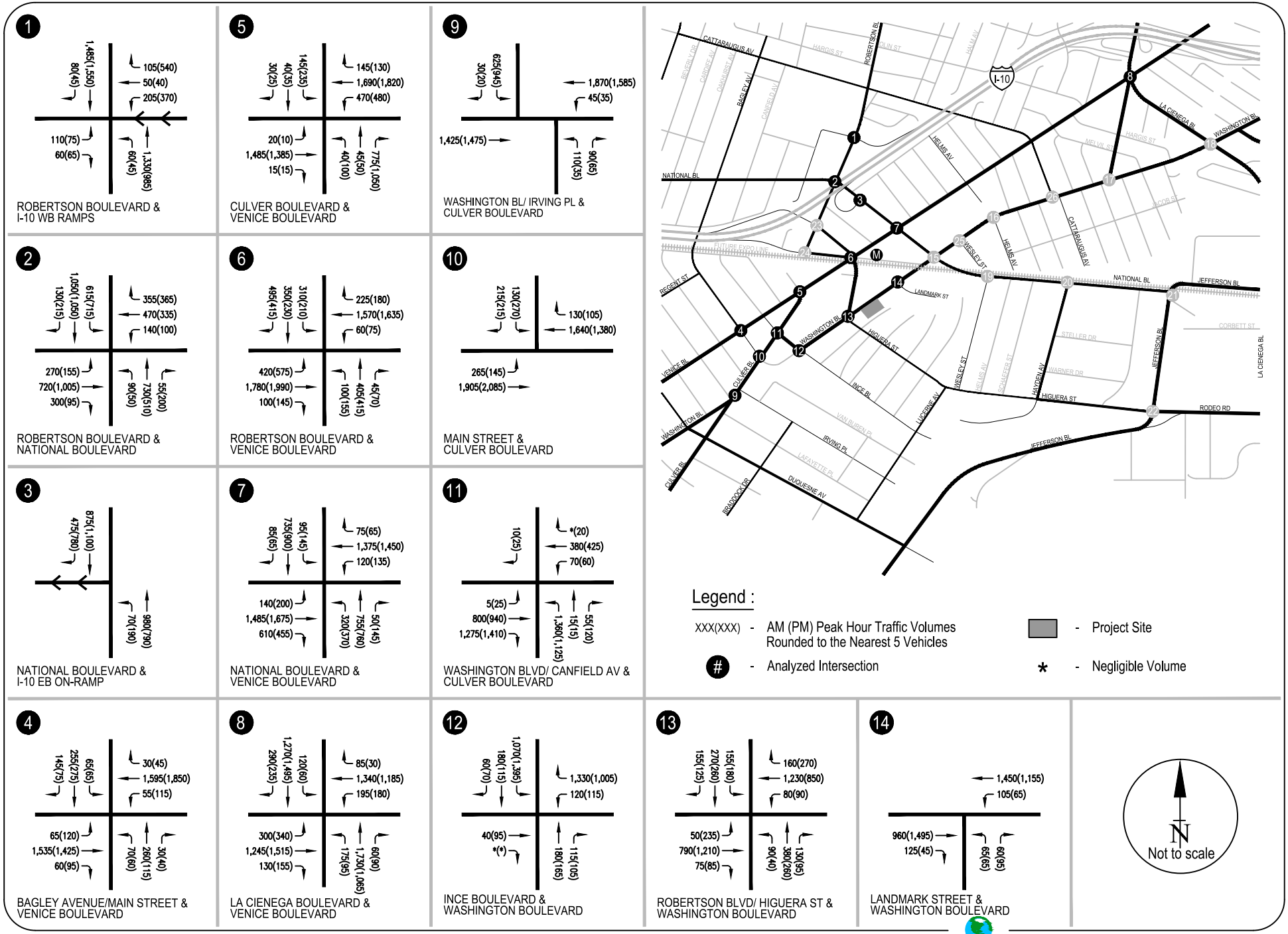


FIGURE 12A
CUMULATIVE (2018) PLUS PROJECT CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

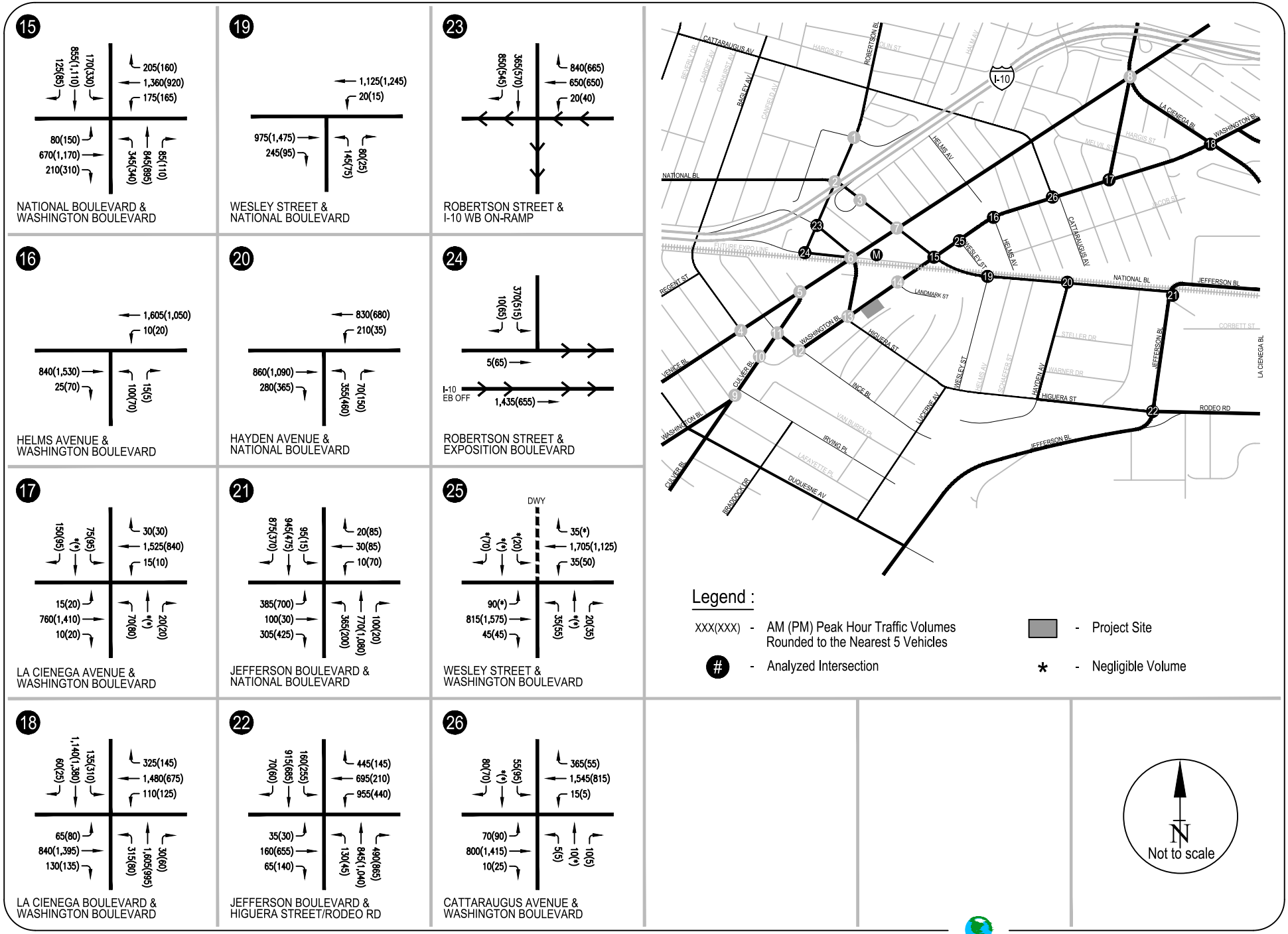


FIGURE 12B
CUMULATIVE (2018) PLUS PROJECT CONDITIONS - PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

V. TRAFFIC CONDITIONS & IMPACT ANALYSIS

The Existing (2016) and Future Year (2018) Cumulative conditions without and with the Project were analyzed utilizing the methodologies and assumptions per the City of Culver City traffic study guidelines. The results were then used to assess the potential impact of the proposed project on the local street system.

The traffic impact analysis compares the volume to capacity (V/C) ratios at each study location under the cumulative base and cumulative plus project conditions to determine the incremental difference in V/C ratios caused by the proposed project. This provides the information needed to assess the potential impact of the project using significance criteria established by the Cities of Culver City and Los Angeles.

SIGNIFICANT TRAFFIC IMPACT CRITERIA

City of Culver City Significant Impact Criteria

For intersections under the City of Culver City jurisdiction, the City of Culver City has established threshold criteria[1] for determining the significance of impacts of a project at a specific location. According to the criteria provided by the City of Culver City, a project impact is considered significant if the following conditions are met:

Intersection Condition With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	
C	0.701 – 0.800	equal to or greater than 0.050
D	0.801 – 0.900	equal to or greater than 0.040
E, F	> 0.900	equal to or greater than 0.020

[1] *Traffic Study Criteria for the Review of Proposed Development Projects within the City of Culver City, July 2012*, City of Culver City Public Works Department/Engineering Division & Community Development Department/Planning Division.

Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS D after the addition of project traffic and the incremental change in the V/C ratio is less than 0.040. However, if the intersection is operating at LOS F after the addition of project traffic and the incremental change in the V/C ratio is 0.020 or greater, the project would be considered to have a significant impact.

City of Los Angeles Significant Impact Criteria

Intersections under the jurisdiction of the City of Los Angeles are evaluated using threshold criteria[2] established by the City of Los Angeles to determine if a project has a significant traffic impact. According to the criteria provided by the City of Los Angeles, a project impact is considered significant if the following conditions are met:

Intersection Condition With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	
C	0.701 – 0.800	equal to or greater than 0.040
D	0.801 – 0.900	equal to or greater than 0.020
E, F	> 0.900	equal to or greater than 0.010

EXISTING (2016) PLUS PROJECT TRAFFIC CONDITIONS

The Existing (2016) plus Project peak hour traffic volumes were analyzed at each of the study intersections to determine the V/C ratio and corresponding level of service. Table 7 presents the results of the Existing (2016) plus Project traffic analysis. As illustrated in the table, 23 of the 26 study intersections are currently operating at LOS D or better during both the morning and evening peak hours. The remaining locations are operating at LOS E or F and includes:

- La Cienega Boulevard/Washington Boulevard: AM Peak Hour – LOS E
- Robertson Boulevard/I-10 Westbound On-Ramp: AM Peak Hour – LOS F
  PM Peak Hour – LOS E
- Wesley Street/Washington Boulevard: PM Peak Hour – LOS F
- Cattaraugus Avenue/Washington Boulevard: AM Peak Hour – LOS F
  PM Peak Hour – LOS E

Capacity calculation worksheets for Existing (2016) plus Project conditions are attached in Appendix D of the report.

[2] *Transportation Impact Study Guidelines, December 2016*, City of Los Angeles Department of Transportation.

TABLE 7
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS

No.	Intersection	Jurisdiction	Peak Hour	Existing (2016) Conditions		Existing (2016) Plus Project Conditions		Project Increase in V/C	Significant Project Impact	Cumulative (2018) Base Conditions		Cumulative (2018) Plus Project Conditions		Project Increase in V/C	Significant Project Impact
				V/C or Delay	LOS	V/C or Delay	LOS			V/C or Delay	LOS	V/C or Delay	LOS		
1.	Robertson Boulevard & I-10 WB Off-Ramp/Kincardine Avenue	Los Angeles	AM	0.588	A	0.593	A	0.005	No	0.708	C	0.712	C	0.004	No
			PM	0.839	D	0.839	D	0.000	No	0.871	D	0.871	D	0.000	No
2.	Robertson Boulevard & National Boulevard	Los Angeles	AM	0.892	D	0.896	D	0.004	No	0.968	E	0.971	E	0.003	No
			PM	0.817	D	0.819	D	0.002	No	0.915	E	0.916	E	0.001	No
3.	National Boulevard & I-10 Eastbound On-Ramp	Los Angeles	AM	0.223	A	0.224	A	0.001	No	0.262	A	0.263	A	0.001	No
			PM	0.452	A	0.455	A	0.003	No	0.543	A	0.546	A	0.003	No
4.	Bagley Avenue & Venice Boulevard	Los Angeles	AM	0.672	B	0.672	B	0.000	No	0.722	C	0.723	C	0.001	No
			PM	0.710	C	0.714	C	0.004	No	0.781	C	0.784	C	0.003	No
5.	Culver Boulevard & Venice Boulevard	Los Angeles	AM	0.565	A	0.568	A	0.003	No	0.645	B	0.648	B	0.003	No
			PM	0.624	B	0.625	B	0.001	No	0.762	C	0.763	C	0.001	No
6.	Robertson Boulevard & Venice Boulevard	Los Angeles	AM	0.728	C	0.729	C	0.001	No	0.872	D	0.873	D	0.001	No
			PM	0.721	C	0.724	C	0.003	No	0.861	D	0.865	D	0.004	No
7.	National Boulevard & Venice Boulevard	Los Angeles	AM	0.707	C	0.716	C	0.009	No	0.866	D	0.875	D	0.009	No
			PM	0.792	C	0.796	C	0.004	No	1.019	F	1.023	F	0.004	No
8.	La Cienega Boulevard & Venice Boulevard [1]	Los Angeles	AM	0.813	D	0.814	D	0.001	No	0.864	D	0.867	D	0.003	No
			PM	0.814	D	0.817	D	0.003	No	0.882	D	0.885	D	0.003	No
9.	Washington Boulevard/Irving Place & Culver Boulevard	Culver City	AM	0.656	B	0.657	B	0.001	No	0.716	C	0.716	C	0.000	No
			PM	0.648	B	0.649	B	0.001	No	0.714	C	0.716	C	0.002	No
10.	Main Street & Culver Boulevard	Culver City	AM	0.684	B	0.684	B	0.000	No	0.786	C	0.787	C	0.001	No
			PM	0.602	B	0.606	B	0.004	No	0.716	C	0.720	C	0.004	No
11.	Washington Boulevard/Canfield Avenue & Culver Boulevard	Culver City	AM	0.697	B	0.698	B	0.001	No	0.801	D	0.802	D	0.001	No
			PM	0.622	B	0.626	B	0.004	No	0.755	C	0.759	C	0.004	No
12.	Ince Boulevard & Washington Boulevard	Culver City	AM	0.858	D	0.862	D	0.004	No	1.014	F	1.017	F	0.003	No
			PM	0.813	D	0.818	D	0.005	No	1.028	F	1.032	F	0.004	No
13.	Robertson Boulevard/Higuera Street & Washington Boulevard	Culver City	AM	0.710	C	0.725	C	0.015	No	0.816	D	0.831	D	0.015	No
			PM	0.649	B	0.658	B	0.009	No	0.785	C	0.801	D	0.016	No
14.	Landmark Street & Washington Boulevard	Culver City	AM	0.442	A	0.458	A	0.016	No	0.507	A	0.522	A	0.015	No
			PM	0.444	A	0.461	A	0.017	No	0.574	A	0.592	A	0.018	No
15.	National Boulevard & Washington Boulevard	Culver City	AM	0.670	B	0.689	B	0.019	No	0.817	D	0.833	D	0.016	No
			PM	0.816	D	0.825	D	0.009	No	0.982	E	0.992	E	0.010	No
16.	Helms Avenue & Washington Boulevard	Culver City	AM	0.540	A	0.544	A	0.004	No	0.600	A	0.605	B	0.005	No
			PM	0.510	A	0.515	A	0.005	No	0.588	A	0.593	A	0.005	No
17.	La Cienega Avenue/McManus Avenue & Washington Boulevard	Culver City	AM	0.573	A	0.578	A	0.005	No	0.628	B	0.633	B	0.005	No
			PM	0.521	A	0.526	A	0.005	No	0.585	A	0.590	A	0.005	No

TABLE 7 (Continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS

No.	Intersection	Jurisdiction	Peak Hour	Existing (2016) Conditions V/C or Delay	Existing (2016) Conditions LOS	Existing (2016) Plus Project Conditions V/C or Delay	Existing (2016) Plus Project Conditions LOS	Project Increase in V/C	Significant Project Impact	Cumulative (2018) Base Conditions V/C or Delay	Cumulative (2018) Base Conditions LOS	Cumulative (2018) Plus Project Conditions V/C or Delay	Cumulative (2018) Plus Project Conditions LOS	Project Increase in V/C	Significant Project Impact
18.	La Cienega Boulevard & Washington Boulevard	Culver City	AM	0.898	D	0.901	E	0.003	No	0.975	E	0.979	E	0.004	No
			PM	0.840	D	0.844	D	0.004	No	0.953	E	0.957	E	0.004	No
19.	Wesley Street & National Boulevard	Culver City	AM	0.429	A	0.434	A	0.005	No	0.520	A	0.525	A	0.005	No
			PM	0.463	A	0.468	A	0.005	No	0.558	A	0.564	A	0.006	No
20.	Hayden Avenue & National Boulevard	Culver City	AM	0.461	A	0.464	A	0.003	No	0.576	A	0.578	A	0.002	No
			PM	0.468	A	0.473	A	0.005	No	0.596	A	0.603	B	0.007	No
21.	Jefferson Boulevard & National Boulevard	Los Angeles	AM	0.875	D	0.876	D	0.001	No	1.060	F	1.061	F	0.001	No
			PM	0.514	A	0.519	A	0.005	No	0.733	C	0.738	C	0.005	No
22.	Jefferson Boulevard & Higuera Street/Rodeo Road	Los Angeles	AM	0.757	C	0.760	C	0.003	No	0.824	D	0.826	D	0.002	No
			PM	0.727	C	0.730	C	0.003	No	0.841	D	0.845	D	0.004	No
23.	Robertson Boulevard & I-10 Westbound On-Ramp [2]	Los Angeles	AM	55.2 s	F	55.2 s	F	0.002	No	54.4 s	F	54.4 s	F	0.002	No
			PM	41.8 s	E	41.9 s	E	0.008	No	44.7 s	E	44.8 s	E	0.008	No
			AM	0.601	[4]	0.603	[4]	-	-	0.709	[4]	0.711	[4]	-	-
			PM	0.628	[4]	0.636	[4]	-	-	0.803	[4]	0.811	[4]	-	-
24.	Robertson Boulevard & Exposition/I-10 Westbound On-Ramp [2]	Los Angeles	AM	10.4 s	B	10.4 s	B	0.000	No	13.3 s	B	13.3 s	B	0.000	No
			PM	14.9 s	B	14.9 s	B	0.000	No	20.2 s	C	20.2 s	C	0.000	No
			AM	0.209	[4]	0.209	[4]	-	-	0.313	[4]	0.313	[4]	-	-
			PM	0.414	[4]	0.414	[4]	-	-	0.487	[4]	0.487	[4]	-	-
25.	Wesley Street & Washington Boulevard [3] [5]	Culver City	AM	22.3 s	C	22.5 s	C	0.006	No						
			PM	49.7 s	E	51.4 s	F	0.006	No						
			AM	0.754	[4]	0.760	[4]	-	-	0.658	B	0.663	B	0.005	No
			PM	0.686	[4]	0.692	[4]	-	-	0.665	B	0.670	B	0.005	No
26.	Cattaraugus Avenue & Washington Boulevard [3]	Culver City	AM	***	F	***	F	0.007	No	***	F	***	F	0.007	No
			PM	41.9 s	E	43.4 s	E	0.006	No	***	F	***	F	0.007	No
			AM	0.961	[4]	0.968	[4]	-	-	1.072	[4]	1.079	[4]	-	-
			PM	0.763	[4]	0.769	[4]	-	-	0.878	[4]	0.885	[4]	-	-

V/C - Volume to Capacity Ratio, LOS - Level of Service

[1] Los Angeles County Congestion Management Program monitoring location.
[2] All-way stop-controlled intersection. LOS based on average vehicular delay in seconds (s).
[3] Stop-controlled on minor approach(es). LOS based on worst case approach delay in seconds (s).
[4] V/C ratio was calculated, based on signalized LOS methodology, to determine project impacts.
[5] The intersection will be signalized in the future.
*** - Oversaturated conditions per Highway Capacity Manual 2010 (HCM).

CUMULATIVE (2018) BASE TRAFFIC CONDITIONS

The Cumulative (2018) Base without proposed project peak hour traffic volumes were analyzed at each of the study intersections to determine the V/C ratio and corresponding level of service. Table 7 presents the results of the Year 2018 Cumulative Base (without project) traffic analysis. As indicated in the table, 20 of the 26 analyzed intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 19 of the 26 analyzed intersections are projected to operate at LOS D or better. Eight of the 26 intersections are projected to be operating at LOS E or F during the morning and/or evening peak hours and include the following:

- Robertson Boulevard/National Boulevard: AM and PM Peak Hour – LOS E
- National Boulevard/Venice Boulevard: PM Peak Hour – LOS F
- Ince Boulevard/Washington Boulevard: AM and PM Peak Hour – LOS F
- National Boulevard/Washington Boulevard: PM Peak Hour – LOS E
- La Cienega Boulevard/Washington Boulevard: AM and PM Peak Hour – LOS E
- Jefferson Boulevard/National Boulevard: AM Peak Hour – LOS F
- Robertson Boulevard/I-10 Westbound On-Ramp: AM Peak Hour – LOS F
  PM Peak Hour – LOS E
- Cattaraugus Avenue/Washington Boulevard: AM and PM Peak Hour – LOS F

A traffic signal at the Wesley Street and Washington Boulevard intersection will be installed as part of the 8770 Washington project. Capacity calculation worksheets for Cumulative (2018) Base conditions are attached in Appendix D of the report.

CUMULATIVE (2018) PLUS PROJECT TRAFFIC CONDITIONS

The Cumulative (2018) Plus Project peak hour traffic volumes were analyzed to determine the V/C ratio and corresponding level of service at each of the analyzed intersections. The results of this analysis are also summarized on Table 7. As in indicated in Table 7, both the morning and evening peak hour operating conditions would be similar to those projected for the Cumulative Base conditions. Twenty of the 26 analyzed intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 19 of the 26 analyzed intersections are projected to operate at LOS D or better.

Eight of the 26 intersections are projected to be operating at LOS E or F during the morning and/or evening peak hours and include the following:

- Robertson Boulevard/National Boulevard: AM and PM Peak Hour – LOS E
- National Boulevard/Venice Boulevard: PM Peak Hour – LOS F
- Ince Boulevard/Washington Boulevard: AM and PM Peak Hour – LOS F
- National Boulevard/Washington Boulevard: PM Peak Hour – LOS E
- La Cienega Boulevard/Washington Boulevard: AM and PM Peak Hour – LOS E
- Jefferson Boulevard/National Boulevard: AM Peak Hour – LOS F
- Robertson Boulevard/I-10 Westbound On-Ramp: AM Peak Hour – LOS F
  PM Peak Hour – LOS E
- Cattaraugus Avenue/Washington Boulevard: AM and PM Peak Hour – LOS F

Capacity calculation worksheets for Cumulative (2018) plus Project conditions are attached in Appendix D of the report.

PROJECT IMPACTS

Using the specified significant impact criteria, the traffic impacts at the analysis locations were determined. Table 7 identifies the individual impacts during both AM and PM peak hours at each of the analysis locations. It can be observed that the Proposed Project does not cause significant impacts at any of the analyzed intersections under both existing and future conditions. Therefore, no project-specific mitigation measures would be required.

VI. STREET SEGMENT AND PARKING/ACCESS ANALYSIS

This chapter provides an analysis of roadway segments in the vicinity of the Project. This analysis is targeted towards assessment of potential neighborhood traffic intrusion impacts as a result of the Proposed Project. Additionally, parking evaluation on site and other access/circulation issues are addressed in this chapter. The parking evaluation consists of examining the proposed parking supply for the Project in relation to the parking requirements for the various uses proposed by the Project. The access and egress evaluation consists of a review of vehicular access and egress driveways to ascertain that adequate provisions are provided by the Project.

RESIDENTIAL STREET SEGMENT TRAFFIC IMPACT ANALYSIS

Working closely with the City of Culver City staff, six roadway segment locations were identified for analysis and assessment of conditions with the Project. These street segments include:

- Higuera Street between Washington Boulevard and Lucerne Avenue
- Higuera Street between Wesley Street and Hayden Avenue
- Wesley Street between National Boulevard and Higuera Street
- Helms Avenue Street between National Boulevard and Higuera Street
- Schaefer Street between National Boulevard and Higuera Street
- Lucerne Avenue between Ince Boulevard and Higuera Street

Existing Street Segment Traffic Volumes

Daily traffic counts were conducted in October 2015 using machine counters. These traffic counts were factored upward 1% per year to reflect existing 2016 conditions. The segment count data for the analyzed segments are included in Appendix C.

Existing daily traffic volumes are summarized in Table 8. As indicated in the table, the existing daily traffic volumes on the analyzed street segments are as follows:

1. Higuera Street between Washington Boulevard and Lucerne Avenue – 8,157 ADT
2. Higuera Street between Wesley Street and Hayden Avenue – 7,642 ADT
3. Wesley Street between National Boulevard and Higuera Street – 951 ADT
4. Helms Avenue Street between National Boulevard and Higuera Street – 754 ADT
5. Schaefer Street between National Boulevard and Higuera Street – 726 ADT
6. Lucerne Avenue between Ince Boulevard and Higuera Street – 5,335 ADT

Cumulative (2018) Base - Street Segment Traffic Volumes

Future daily traffic volumes were projected for the residential streets in a manner similar to that used for the intersections described earlier. Firstly, with the assumed completion date of 2018, the existing 2016 traffic volumes were adjusted upward by a factor of 2% (1% per year compounded annually) to reflect this area-wide regional growth. Secondly, from traffic generated by specific cumulative projects located within, or in the vicinity of, the study area were added to the existing plus ambient growth traffic to obtain the Cumulative (2018) Base traffic volumes. The resulting Cumulative (2018) Base street segment daily and peak hour traffic volumes are summarized in Table 8.

Cumulative (2018) plus Project - Street Segment Traffic Volumes

Based on the distribution assumptions (included in Figure 5) and the daily trip generation estimates (approximately 1,146 daily trips) for the Proposed Project, daily traffic estimates of project-only trips were developed. It was determined that the Project would add 23 daily trips to Higuera Street between Washington Boulevard and Lucerne Avenue, and Lucerne Avenue between Ince Boulevard and Higuera Street. The Cumulative (2018) plus Project daily traffic volumes resulting from the addition of trips generated by the Proposed Project are shown in Table 8.

TABLE 8
RESIDENTIAL STREET TRAFFIC ANALYSIS

Street Segment	Time Period	Two-Way Traffic Volume				Project % Increase	Significant Impact
		Existing (2016) Conditions	Cumulative (2018) Base Conditions	Project Traffic	Cumulative (2018) Plus Project		
Higuera Street	ADT	8,157	9,203	23	9,226	0.2%	No
between Washington Boulevard and Lucerne Avenue	AM	797	871	2	873	0.2%	No
	PM	704	783	2	785	0.3%	No
Higuera Street	ADT	7,642	8,599	0	8,599	0.0%	No
between Wesley Avenue and Hayden Avenue	AM	776	847	0	847	0.0%	No
	PM	761	834	0	834	0.0%	No
Wesley Street	ADT	951	996	0	996	0.0%	No
between National Boulevard and Higuera Street	AM	85	88	0	88	0.0%	No
	PM	131	136	0	136	0.0%	No
Helms Avenue	ADT	754	769	0	769	0.0%	No
between National Boulevard and Higuera Street	AM	91	93	0	93	0.0%	No
	PM	74	75	0	75	0.0%	No
Schaefer Street	ADT	726	741	0	741	0.0%	No
between National Boulevard and Higuera Street	AM	92	94	0	94	0.0%	No
	PM	44	45	0	45	0.0%	No
Lucerne Avenue	ADT	5,335	5,547	23	5,570	0.4%	No
between Ince Boulevard and Higuera Street	AM	603	619	2	621	0.3%	No
	PM	539	559	2	561	0.4%	No

Street Segment Significant Impact Criteria

As outlined in the City of Culver City Traffic Study Criteria, the following specific threshold criteria for project impacts to any street segment detailed below were used in this study:

Projected Avenue Daily Traffic (ADT) with Project	Project-Related Increase in Average Daily (ADT) Volume
999 Less	120 or more
1,000 to 1,999	12% or more of final ADT
2,000 to 2,999	10% or more of final ADT
3,000 or more	8% or more of final ADT

Assessment of Significant Impacts

As shown in Table 8, the Proposed Project would increase the traffic on Higuera Street roadway segment between Washington Boulevard and Lucerne Avenue by 0.2% on a daily basis and by 0.2% and 0.3% during the morning and evening peak hours, respectively. On Lucerne Avenue between Ince Boulevard and Higuera Street, the Proposed Project would increase traffic by 0.4% on a daily basis and by 0.3% during the morning peak hour and 0.4% during the evening peak hour. On the other four analyzed segments, the proposed project is not expected to increase traffic on those segments.

The potential impacts of the Proposed Project traffic on the adjacent neighborhood residential streets were assessed using the City of Culver City criteria specified earlier in the chapter. The results of the analysis, which are summarized in Table 8, indicate that the Proposed Project would not have a significant impact on the residential streets in the local neighborhood.

PARKING EVALUATION

The Proposed Project consists 59,325 square feet of office use, 2,878 square feet of retail use, and 3,184 square feet of restaurant use. The Project would provide 212 parking spaces. The ground floor would contain four loading spaces and one ADA van accessible space, and the subterranean parking levels would contain 207 spaces. The Project site plan is shown in Figure 2.

The following are the parking requirements contained within Section 17.320.020 Number of Parking Spaces Required established by the Culver City Municipal Zoning Code:

- Offices, Administrative, Corporate, Professional, Creative - 1 space per 350 G.S.F.
- Retail and personal service uses, general – 1 space per 350 G.S.F.
- Restaurant, general (table service) greater than 1,500 G.S.F. – 1 space per 100 G.S.F.

Based on these requirements, the required parking for this project would be 211 spaces as shown on the following calculations:

- Office: 59,325 G.S.F. x 1 space/350 G.S.F. = 170 spaces
- Retail: 2,878 G.S.F x 1 space/350 G.S.F = 9 spaces
- Restaurant: 3,184 G.S.F x 1 space/100 G.S.F = 32 spaces

The Project would provide a total 212 parking spaces. Therefore, there would be adequate parking for the Proposed Project.

ACCESS AND CIRCULATION

The proposed project driveway is located along Washington Boulevard along the western boundary of the project site. The proposed project driveway would provide access to the site and the subterranean parking facility. Access to the subterranean parking facility would be via four parking elevators. The existing three driveways along Washington Boulevard to the site would be removed.

In the proposed subterranean parking facility, the four parking elevators would transport vehicles to any of the three levels of parking. This automated parking system operates with the driver driving the vehicle onto the vehicle elevator. The elevator system would automatically move the vehicles by lift which then transfers it to a waiting cart on one of the multi- levels. The carts then travel horizontally and place the vehicle in its appropriate parking space. Upon retrieval of the vehicle, the elevator system will lift the car from its parking space and deliver the car to the exit area. The vehicle will be delivered in the exit area so that the front of the vehicle is oriented towards the exit of the parking elevator.

A preliminary Parking Operations Plan for the automated parking facility proposed for the Project on-site, has been prepared. Per the parking facility's automated system specifications, the retrieval rate at the proposed facility would range between 65 seconds per vehicle to 150 seconds per vehicle. The retrieval rate is the speed of the system and does not include the time associated with loading, unloading, etc. that would comprise of the overall processing rate.

The processing rate is dependent primarily upon the vertical and horizontal distance a vehicle has to be transported to and from its parking space, whether the space is a tandem space or not, etc. The (non-tandem) spaces closest to the elevator shaft take the least amount of time to process while those spaces farthest from the elevator shaft take the most amount of time to process. This fact is demonstrated in Figure 13 (also provided in the Parking Operations Plan). Based on the exhibits in the Parking Operations Plan, a processing rate of 90 seconds per vehicle is available in the automated parking structure for approximately 50 spaces per level (total of 150 spaces).

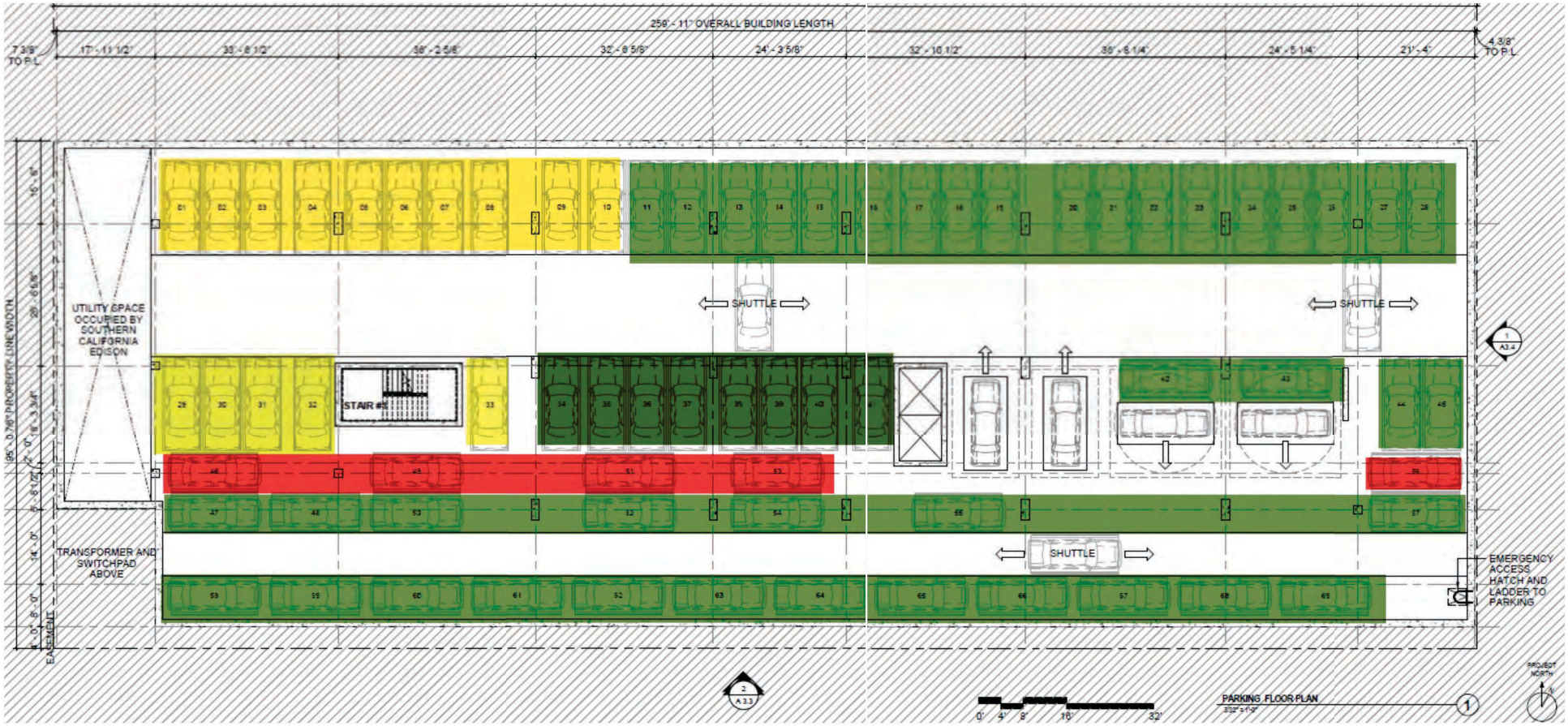
Queueing Analysis

A queueing analysis of trips inbound to the Project Site during the morning peak hour when maximum number of inbound vehicular traffic is anticipated, was conducted to assess the potential of vehicles queueing in the driveway aisle within the Project Site beyond the access driveway and spilling over on to the external street system (Washington Boulevard).

This queuing analysis is based on a number of factors including but not limited to the following:

- Arrival Volumes - Magnitude of arriving vehicles and peaking characteristics of the morning peak hour inbound traffic when maximum number of these vehicles are anticipated to arrive on site
- Processing rate of these vehicles on site
- Length of available storage of vehicles on site, and
- Available temporary parking spaces for loading/unloading and temporary storage of vehicles

Details of the associated calculations and analysis are enclosed in Appendix E of this report.



LEGEND:

- 65-90 seconds/vehicle retrieval rate
- 90-120 seconds/vehicle retrieval rate
- 120-150 seconds/vehicle retrieval rate

N

Not to scale

FIGURE 13
DISTRIBUTION OF PARKING SPACES BASED ON SERVICE RATE

RAJU Associates, Inc.

Based on the queueing analysis, it can be observed that during the peak times of the morning peak hour, a maximum total of 42 vehicles would arrive within a peak 15-minute period. Based on a processing rate of the system (including all-day valet services) of 90 seconds per vehicle, a total of 40 vehicles within the same time period can be processed by the system with all four operating vehicular elevators. A maximum queue of 2 vehicles would remain on site. The maximum available storage on-site, based on the Site Plan, is 10 vehicles in the queue plus four (4) short-term loading spaces and one (1) ADA parking space. Therefore, there would not be any queueing vehicles that would extend beyond the site on to the external roadway system (Washington Boulevard) assuming the maximum peaking characteristics of the arriving vehicles in the morning peak hour. Consequently, the traffic flow along Washington Boulevard would not be affected by inbound vehicles extending out of the Project driveway.

Per City of Culver City's request, a queueing analysis with three of the four parking elevators being available during the morning peak conditions was conducted. With the estimated processed rate of the system (with 3 of the 4 elevators available) with all day valet services at 90 seconds per vehicle, a total of 30 vehicles (3600 / 4 (in 15-minutes) / 90 seconds per vehicle * 3 elevators) can be processed by the system within the same peak 15-minute interval. Using a maximum arrival of a total of 42 vehicles within the peak 15-minute period, a maximum queue of 12 vehicles is anticipated. Again, the maximum available storage on-site, based on the Site Plan, is 10 vehicles in the storage lane on site plus four (4) short-term loading spaces and one (1) ADA parking space for a total of 14 to 15 vehicles that can be stored on site. Therefore, there would still not be any queueing vehicles that would extend beyond the site on to the external roadway system (Washington Boulevard) assuming the maximum peaking characteristics of the arriving vehicles in the morning peak hour and 3 of the 4 parking elevators available during that same time period. Consequently, the traffic flow along Washington Boulevard would not be affected by inbound vehicles extending out of the Project driveway even with 3 of the 4 parking elevators available during the peak time period in the AM peak hour.

VII. REGIONAL/CMP ANALYSIS

This section presents the Congestion Management Program (CMP) transportation impact analysis. This analysis was conducted in accordance with the procedures outlined in the *2010 Congestion Management Program for Los Angeles County* (Los Angeles County Metropolitan Transportation Authority, 2010). The CMP requires that when a traffic impact report is prepared for a project, traffic impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to use these facilities.

CMP TRAFFIC IMPACT ANALYSIS

The CMP guidelines for determining the study area for analysis of CMP arterial monitoring intersections and for freeway monitoring locations are as follows:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The CMP arterial monitoring intersections within a three-mile from the Project site includes the following:

- La Cienega Boulevard/Venice Boulevard (Study Int. 8) – City of Los Angeles jurisdiction
- La Cienega Boulevard/Jefferson Boulevard – City of Los Angeles jurisdiction
- Centinela Avenue/Venice Boulevard – City of Los Angeles jurisdiction
- La Cienega Boulevard/Stocker Street – County of Los Angeles jurisdiction
- La Cienega Boulevard/Wilshire Boulevard – City of Beverly Hills jurisdiction
- Santa Monica Boulevard/Wilshire Boulevard – City of Beverley Hills jurisdiction
- Overland Avenue/Venice Boulevard – City of Culver City jurisdiction

Based on the incremental Project trip generation estimates presented in Chapter III, the Proposed Project is not expected to add 50 or more new trips per hour to any of these locations. Therefore, no further analysis of these CMP monitoring intersections would be required. However, one of the CMP arterial monitoring intersections listed above, La Cienega Boulevard/Venice Boulevard, has

been included in the traffic analysis and it was determined that the Project would not have a significant intersection traffic impact at this location.

The CMP mainline freeway monitoring locations within a three-mile radius from the Project site includes the following:

- Santa Monica (I-10) Freeway east of Overland Avenue
- Santa Monica (I-10) Freeway east of La Brea Avenue
- San Diego Freeway (I-405) north of Venice Boulevard

Based on the incremental Project trip generation estimates, the Proposed Project will not add 150 or more new trips per hour to these locations in either direction. Therefore, no further analysis of CMP freeway monitoring stations is required.

VIII. CALTRANS FREEWAY IMPACT SCREENING ANALYSIS

This freeway screening procedure has been prepared in accordance with the screening criteria described in the first amendment (dated on December 15, 2015) to Section 3 of the "Agreement Between City of Los Angeles and Caltrans District 7 On Freeway Impact Analysis Procedures", dated October 2013. The amended Section 3.1 of the Agreement specifies the following:

> "3.1 City will require Project applicants to work with Caltrans and prepare a Freeway Impact Analysis, utilizing Caltrans' "Guide for the Preparation of Traffic Impact Studies" ("TIS Guide"), for land use proposals that meet any of the following criteria:
>
> - The project's peak hour trips would result in a 1-percent or more increase to the freeway mainline capacity of a freeway segment operating at level-of-service (LOS) E or F (based on an assumed capacity of 2,000 vehicles per hour per lane); or
> - The project's peak hour trips would result in a 2-percent or more increase to the freeway mainline capacity of a freeway segment operating at LOS D (based on an assumed capacity of 2,000 vehicles per hour per lane); or
> - The project's peak hour trips would result in a 1-percent or more increase to the capacity of a freeway off-ramp operating at LOS E or F (based on an assumed ramp capacity of 850 vehicles per hour per lane); or
> - The project's peak hour trips would result in a 2-percent or more increase to the capacity of a freeway off-ramp operating at LOS D (based on an assumed ramp capacity of 850 vehicles per hour per lane)."

The purpose of this analysis is to apply the above screening criteria to determine whether a Freeway Impact Analysis would be required for the Proposed Project. The methodologies used to conduct the screening analysis for the project, and the results of the screening, are described below.

INITIAL STEPS

- Project trip generation estimates were prepared in accordance with the latest version of LADOT's Traffic Study Policies and Procedures. The project trip generation estimates as accepted by LADOT is shown in Table 5.

- The resulting overall trip distribution for the freeway mainline, on-ramps and off-ramps is shown in Figure 5. As indicated in Figure 5, it was determined that 10% of project trips may utilize the I-10 freeway to/from the west, 5% may utilize the I-10 Freeway to/from the east.

- Based on this distribution, two freeway mainline segments were determined to be utilized by the Project and were selected for screening. They include:

    - I-10 Freeway east of National Boulevard
    - I-10 Freeway west Robertson Boulevard

- Also based on the trip distribution, two freeway off-ramps were selected for screening:

    - I-10 Westbound Off-Ramp at National Boulevard
    - I-10 Eastbound Off-Ramp at Robertson Boulevard

FREEWAY MAINLINE SEGMENT SCREENING

- The freeway mainline segment screening analysis is shown in Table 9.

- The number of lanes and capacity for each freeway segment was determined. A capacity of 2,000 vehicles per hour per lane was assumed.

- The worst-case LOS screening threshold was used to determine the trigger (i.e. the number of trips) for each freeway segment for exceeding the threshold:

    - Threshold=≥1% of segment capacity if worst-case LOS is E or F

      Where the assumed capacity = 2,000 vphpl multiplied by the number of lanes on the freeway mainline. In other words, the threshold is 20 vphpl at LOS E or F, multiplied by the number of lanes on the freeway mainline.

- The project-added trips to each freeway mainline segment were compared to the trigger threshold. As shown in Table 9, the screening analysis determined that the screening threshold criteria would not be triggered at any of the two freeway mainline segments. Furthermore, since the project traffic did not trigger the screening thresholds at the mainline segments most likely to be used by project traffic, there is no need to look at segments farther away. Therefore, a Freeway Impact Analysis is not required.

TABLE 9
CALTRANS FREEWAY IMPACT SCREENING ANALYSIS - FREEWAY MAINLINE

Location	Peak Hour	Project Trips		Freeway Mainline Capacity [a]		Caltrans Criteria for Impact Analysis [b]		Freeway Impact Analysis Required?
		WB	EB	WB	EB	WB	EB	
I-10 Freeway,	AM	4	1	8,000	10,000	80	100	**NO**
east of National Boulevard	PM	2	5	8,000	10,000	80	100	**NO**
I-10 Freeway,	AM	2	8	8,000	10,000	80	100	**NO**
west of Robertson Boulevard	PM	9	3	8,000	10,000	80	100	**NO**

WB = westboud, EB = eastbound

[a] The freeway capacity is 2,000 vehicles per hour per lane.

[b] A 1% or more increase to the freeway mainline capacity for a freeway segment operating at LOS E or F would require a freeway impact analysis.

FREEWAY RAMP SCREENING

- The freeway ramp screening analysis is shown in Table 10.

- For each ramp, the LOS screening threshold was used to determine the trigger (i.e. the number of trips) for each freeway off-ramp for exceeding the threshold:

    - Threshold=≥2% of assumed ramp capacity if approach LOS is D
    - Threshold=≥1% of assumed ramp capacity if approach LOS is E or F

    Where the assumed ramp capacity = 850 vphpl multiplied by the number of approach lanes on the ramp approach to the intersection. In other words, the threshold is 17 vphpl at LOS D and 8.5 vphpl at LOS E or F, multiplied by the number of lanes on the ramp approach to the intersection.

- The project-added trips to each off-ramp were compared to the appropriate threshold. As shown in Table 10, the screening analysis determined that the screening threshold criteria would not be triggered at any of the two freeway off-ramps. Furthermore, since the project traffic did not trigger the screening thresholds at the ramps most likely to be used by project traffic, there is no need to look at ramps further away. Therefore, a Freeway Ramp Impact Analysis is not required.

- Although no further analyses of freeway ramps are needed, the project study analyzed the two ramp intersections, I-10 Westbound Off-Ramp at National Boulevard and I-10 Eastbound Off-Ramp at Robertson Boulevard, and the project impacts were evaluated at these locations as discussed in the main body of the report. None of the analyzed ramp intersections would be significantly impacted by the proposed project.

TABLE 10
CALTRANS FREEWAY IMPACT SCREENING ANALYSIS - FREEWAY OFF-RAMP

Location	Peak Hour	Project Trips	Freeway Off- Ramp Capacity [a]	Caltrans 1% Criteria for Impact Analysis [b]	Caltrans 2% Criteria for Impact Analysis [c]	Off-Ramp Impact Analysis Required?
I-10 Freeway Westbound	AM	4	1,700	17	34	**NO**
Off-Ramp at National Boulevard	PM	2	1,700	17	34	**NO**
I-10 Freeway Eastbound	AM	8	1,700	17	34	**NO**
Off-Ramp at Robertson Boulevard	PM	3	1,700	17	34	**NO**

[a] The freeway off-ramp capacity is 850 vehicles per hour per lane.

[b] A 1% or more increase to the capacity of a freeway off-ramp operating at LOS E or F would require a freeway impact analysis.

[c] A 2% or more increase to the capacity of a freeway off-ramp operating at LOS D would require a freeway impact analysis.

IX. SUMMARY OF CONCLUSIONS

This study was undertaken to assess existing traffic conditions with and without the Proposed Project, estimate future conditions with and without the Proposed Project, analyze potential traffic impacts of the Proposed Project, assess required improvements and identify/recommend project mitigation to alleviate the significant traffic impacts on the transportation system, if needed. Raju Associates, Inc. performed this detailed study and the following summarizes the results of the analysis:

- Twenty-six intersections were analyzed within the study area for this project. These locations are within the study area bounded by Cattaraugus Avenue on the north, Jefferson Boulevard/Rodeo Road on the south, Hughes Avenue/Duquesne Avenue on the west and La Cienega Boulevard on the east. Of the 26 intersections, 14 intersections are located within the City of Culver City and 12 intersections within the City of Los Angeles.

- Currently, 24 of the 26 analyzed intersection locations are operating at levels of service (LOS) D or better during the morning peak hour. During the evening peak hour, 23 of the 26 analyzed intersections are operating at LOS D or better. The remaining intersections are operating at LOS E or F.

- In the Cumulative (Future Year 2018) Base conditions, i.e., future conditions without the implementation of the Proposed Project, 20 of the 26 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 19 of the 26 analyzed intersections are projected to operate at LOS D or better. The remaining intersections are projected to operate at LOS E or F.

- The Proposed Project consists of 59,325 square feet of office use, 2,878 square feet of retail use, and 3,184 square feet of restaurant use. The existing site contains an auto repair facility auto repair facility with a building size of 9,992 square feet which will be demolished. The Project is estimated to generate a net total of 100 trips during the morning peak hour and 124 trips during the evening peak hour.

- In the Existing (2016) plus Project conditions, both the morning and evening peak hour operating conditions would be similar to those for the Existing conditions. Under this scenario, 23 of the 26 analyzed intersection locations would continue to operate at acceptable levels of service (LOS) D or better during both the morning and evening peak hours. The remaining intersections would be operating at LOS E or F.

- The Existing (2016) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during the weekday morning and evening peak hours.

- In the Cumulative (Future Year 2018) plus Project conditions, both the morning and evening peak hour operating conditions would be similar to those projected for the Cumulative Base conditions. Under this scenario, 20 of the 26 study intersections are projected to operate at LOS D or better during the morning peak hour. During the evening peak hour, 19 of the 26 analyzed intersections are projected to operate at LOS D or better. The remaining intersections are projected to operate at LOS E or F.

- The Cumulative (Future Year 2018) plus Project traffic conditions indicate that the Proposed Project would not cause significant traffic impacts at any of the analysis locations during both the weekday morning and evening peak hours.

- The Proposed Project would not have a significant impact on the residential streets in the local neighborhood.

- The Proposed Project would add less than 50 trips to the nearest Congestion Management Program (CMP) arterial monitoring locations and would add less than 150 trips in either direction to the nearest CMP mainline freeway monitoring locations during both the weekday morning and evening peak hours. Per CMP guidelines, no further CMP analysis is required.

- The screening analysis determined that the screening threshold criteria would not be triggered at any of the two freeway mainline segments and two freeway off-ramps. Furthermore, since the project traffic did not trigger the screening thresholds at the mainline segments and off-ramps most likely to be used by project traffic, there is no need to look at segments or ramps farther away. Therefore, a Freeway Impact Analysis and Freeway Ramp Impact Analysis is not required.

- The Proposed Project shall make a contribution of $100,000 towards transportation improvements including Intelligent Transportation System (ITS) signal system improvements and bicycle and pedestrian system improvements. The contribution will be due at the time of issuance of a Certificate of Occupancy.

Summarizing, the Proposed Project would not cause any significant impacts at any of the analyzed intersections. Therefore, no project-specific mitigation measures would be required.

APPENDIX A

Memorandum of Understanding

DRAFT

Attachment A

Memorandum Of Understanding For Traffic Study

This Memorandum of Understanding (MOU) acknowledges and agrees to all of the City of Culver City requirements and fees for the preparation of a traffic study for the following project:

Project Name: 8888 Washington Boulevard Project

Project Address: 8888 Washington Boulevard Culver City, CA

Project Description: 59,325 GFA Office / _____ GFA Industrial
2,878 GFA Retail / _____ Residential Units
3,184 GFA Restaurant / _____ GFA Other

* Gross Floor Area (GFA) shall be as defined in the most recent ITE publication.

Project Horizon Year: 2018 Ambient Growth Rate: One (1.0) % Per Year

Directional Distribution: N: 20 % S: 15% % E: 35 % W: 30 %

[Attach map(s) illustrating directional distribution percentages at all intersections and driveways.]
Please see Attachment A.

Trip Generation Rate(s): ITE Latest Edition / Other: **Please see Attachment B.**

Land Use:

	ITE Code #: In / Out	ITE Code #: In / Out	Total In / Total Out
AM Trips:	___ / ___	___ / ___	82 / 18
PM Trips:	___ / ___	___ / ___	33 / 91

Use additional pages if necessary.

Prior to the start of any proposed project analysis, the Traffic Consultant shall:

1) Obtain a list of related projects from the City of Culver City Planning Division and from all other affected jurisdictions;
2) Prepare a draft list of "related projects specific to the proposed project"; and **Please see Attachment C.**
3) Obtain written approval from the City of the "related projects specific to the proposed project" list.

Intersections To Be Studied: **26 intersections, please also see Attachment D.**

No.	Intersection: / Jurisdiction:
1.	Robertson Boulevard & I-10 WB Off-Ramp / City of Los Angeles/Caltrans
2.	Robertson Boulevard & National Boulevard / City of Los Angeles
3.	National Boulevard & I-10 EB On-Ramp / City of Los Angeles/Caltrans
4.	Bagley Avenue & Venice Boulevard / City of Los Angeles/Caltrans
5.	Culver Boulevard & Venice Boulevard / City of Los Angeles/Caltrans
6.	Robertson Boulevard & Venice Boulevard / City of Los Angeles/Caltrans
7.	National Boulevard & Venice Boulevard / City of Los Angeles/Caltrans
8.	La Cienega Boulevard & Venice Boulevard / City of Los Angeles/Caltrans
9.	Culver Boulevard & Washington Bl-Irving Place / Culver City
10.	Main Street & Culver Boulevard / Culver City
11.	Canfield Avenue-Washington Bl & Culver Boulevard / Culver City
12.	Ince Boulevard & Washington Boulevard / Culver City
13.	Robertson Boulevard-Higuera St & Washington Bl / Culver City
14.	Landmark Street & Washington Boulevard / Culver City
15.	National Boulevard & Washington Boulevard / Culver City
16.	Helms Avenue & Washington Boulevard / Culver City
17.	La Cienega Avenue & Washington Boulevard / Culver City

18. La Cienega Boulevard & Washington Boulevard / Culver City
19. Wesley Street & National Boulevard / Culver City
20. Hayden Avenue & National Boulevard / Culver City
21. Jefferson Boulevard & National Boulevard / City of Los Angeles
22. Jefferson Boulevard & Higuera Street-Rodeo Road / City of Los Angeles
23. Robertson Boulevard & I-10 WB On-Ramp / City of Los Angeles/Caltrans
24. Robertson Boulevard & Exposition Bl./I-10 EB Off-ramp / City of Los Angeles/Caltrans
25. Wesley Street & Washington Boulevard / Culver City
26. Cattaraugus Avenue & Washington Boulevard / Culver City

Use additional pages if necessary. Additionally, indicate any intersections that are subject to capacity analysis credit for advanced traffic signal control synchronization. Indicate any non-signalized intersections to be studied.

Residential Streets To Be Studied

No.	Street Segment:	/ Jurisdiction:
1.	Higuera Street between Washington Bl and Lucerne Avenue	/ Culver City
2.	Higuera Street between Wesley Street and Hayden Avenue	/ Culver City
3.	Wesley Street between National Boulevard and Higuera St	/ Culver City
4.	Helms Avenue between National Boulevard and Higuera St	/ Culver City
5.	Schaefer Street between National Boulevard and Higuera St	/ Culver City
6.	Lucerne Avenue between Ince Boulevard and Higuera St	/ Culver City

Use additional pages if necessary. Additionally, all intersection and street segment traffic count data shall be submitted both in written format and in an electronic format acceptable to the City.

Indicate trip credits to be requested (Amount subject to City approval):	Yes	No
1. Existing Uses:	X	□
2. Pass-By Trips:	X	□
3. Internal Trip Capture:	X	□
4. Transit Oriented Developments (TOD):	X	□
5. Transportation Demand Management (TDM):	□	X

Proposed Traffic Mitigation

Any proposed traffic mitigation measure shall be listed and accompanied by a drawing of the existing and proposed improvements [including city boundary lines and existing / proposed property lines] and plans shall be of a minimum scale of one inch (1") equal to forty feet (40'-0").

Post-Occupancy Traffic Counts

By signing below, the Property Owner / Developer / Applicant hereby agrees to pay for and submit to the City a post-occupancy traffic count analysis of the development to the satisfaction of the City. The analysis shall determine the amount of actual traffic generated by the development compared to the ITE trip generation rates. The analysis shall include traffic counts of all onsite driveways to be taken upon reaching eighty five percent (85.0%) occupancy of the total building gross floor area or within one (1) year of the issuance of the first Temporary Certificate of Occupancy (TCO), as determined by the City. The data shall be used to confirm the findings in the approved traffic study, and shall not result in any additional traffic mitigation measures and/or conditions of approval on the subject project.

Congestion Management Plan (CMP)
This project shall also be subject to all City imposed CMP developer fees if the Planning Commission approval date is on or after the effective date of any City Council imposed CMP developer fees or as may be otherwise imposed by the City.

Signatures

	Property Owner / Applicant:	Developer / Applicant:
Name [Signed]:		
Name [Printed]:	Mr. Joseph Miller	
Company:	The Runyon Group	
Address:	9900 Culver Bl, Suite 1A	
City / State / Zip:	Culver City, CA, 90232	
Office:	(310) 275-0483	( )
Fax:	( )	( )
Cell:	( )	( )
E-Mail:	joseph@runyongroup.com	

Traffic Consultant:

Name:	Srinath Raju, P.E.
Company:	Raju Associates, Inc.
Address:	505 E. Colorado Bl, Suite 202
City / State / Zip:	Pasadena, CA, 91101
Office:	(626) 792-2700
Fax:	(626) 792-2772
Cell:	(310) 569-7559
E-Mail:	srinath.raju@rajuassociates.com

If any of the intersection(s) to be studied as part of this traffic study are located within the City of Los Angeles, the unincorporated areas of Los Angeles County and/or impact any other public agency [i.e., CalTrans], then this MOU shall also be approved by the reviewing staff representative from each agency:

	City of Los Angeles:	County of Los Angeles:
Name [Signed]:		
Name [Printed]:		
Company:		
Address:		
City / State / Zip:		
Office:	( )	( )
Fax:	( )	( )
Cell:	( )	( )
E-Mail:		

	Other Public Agency:	Other Public Agency:
Name [Signed]:		
Name [Printed]:		
Company:		
Address:		
City / State / Zip:		
Office:	(____)	(____)
Fax:	(____)	(____)
Cell:	(____)	(____)
E-Mail:		

Approved by:

/		/	
Property Owner – Applicant	Date	Developer – Applicant	Date

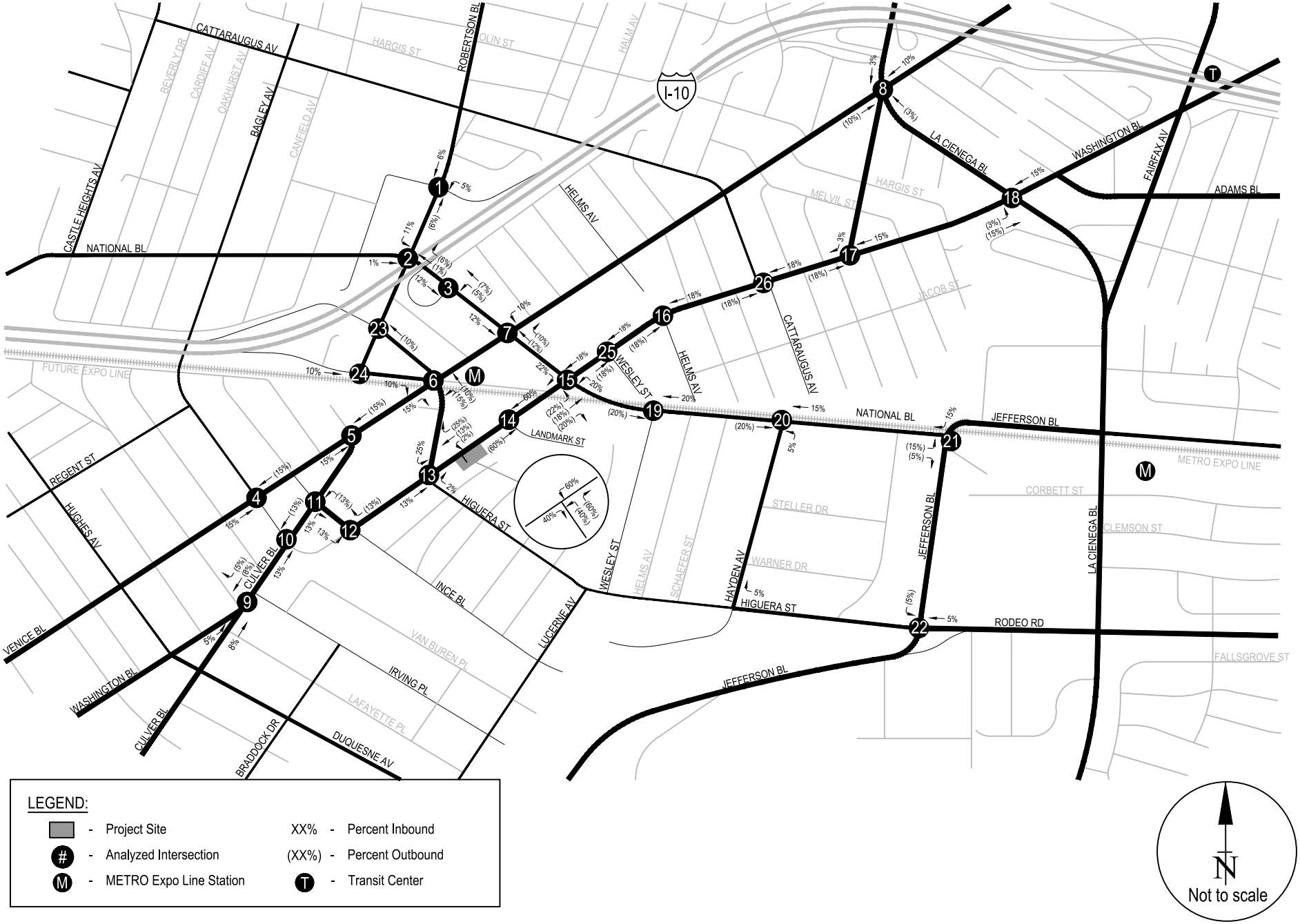
Srinath

/ 1/24/2017
Traffic Consultant Date

/ 2/2/2017
City of Culver City Date

Note: This MOU shall become valid as of the date of the City's signature and shall expire one (1) year thereafter. If the "administrative draft" of the traffic study has not been filed with the City by the expiration date, this MOU shall expire and a new MOU filing, review and approval process shall be required.

BK-JM/abn



ATTACHMENT A
PROJECT TRIP DISTRIBUTION

RAJU Associates, Inc.

ATTACHMENT B
ESTIMATED PROJECT TRIP GENERATION

	Size	Daily	AM Peak Hour IN	AM Peak Hour OUT	AM Peak Hour TOTAL	PM Peak Hour IN	PM Peak Hour OUT	PM Peak Hour TOTAL
Proposed Project								
Office	59,325 s.f.	883	111	15	126	25	120	145
	Transit Trip Use (25%)	(221)	(28)	(4)	(32)	(6)	(30)	(36)
	*Internal Capture (10%) Trip Credit	(66)	(8)	(1)	(9)	(2)	(9)	(11)
Retail	2,878 s.f.	677	11	7	18	27	29	56
	Internal Capture (10%) Trip Credit	(68)	(1)	(1)	(2)	(3)	(3)	(6)
	**Pass-By Trip Reduction (25%)	(152)	(3)	(1)	(4)	(6)	(7)	(13)
High-Turnover Restaurant	3,184 s.f.	405	19	15	34	19	12	31
	Internal Capture (10%) Trip Credit	(41)	(2)	(1)	(3)	(2)	(1)	(3)
	**Pass-By Trip Reduction (25%)	(91)	(4)	(4)	(8)	(4)	(3)	(7)
Existing Uses (to be removed)								
Auto Repair Shop	9,992 s.f.	200	15	7	22	17	19	36
	Pass-By Trip Reduction (10%)	(20)	(2)	0	(2)	(2)	(2)	(4)
Project Net Trip Generation Total		**1,146**	**82**	**18**	**100**	**33**	**91**	**124**
Trip Generation Rates [1]								
Office (ITE Land Use 710)	Trips per 1,000 s.f.	[2]	88%	12%	[2]	17%	83%	[2]
Retail/Shopping Center (ITE Land Use 820)	Trips per 1,000 s.f.	[3]	62%	38%	[3]	48%	52%	[3]
High-Turnover Restaurant (ITE Land Use 932)	Trips per 1,000 s.f.	127.15	55%	45%	10.81	60%	40%	9.85
Automobile Care Center (ITE Land Use 942)	Trips per 1,000 s.f.	20.00 [4]	66%	34%	2.25	48%	52%	[5]

* Internal capture trips determined after reduction of transit trips.

** Pass-by trips determined after reduction of internal capture trip credit.

[1] Trip generation rates from *Trip Generation Manual* , 9th Edition, ITE 2012, unless otherwise noted.

[2] Trip generation for office was calculated using the following equations:

Daily:	Ln(T) = 0.76 Ln(X) + 3.68	Where:
AM Peak Hour:	Ln(T) = 0.80 Ln(X) + 1.57	Ln = Natural logarithm
PM Peak Hour:	T = 1.12 (X) + 78.45	T = Two-way volume of traffic (total trip-ends)
		X = Area in 1,000 square feet gross floor area

[3] Trip generation for retail/shopping center was calculated using the following equations:

		Where:
Daily:	Ln(T) = 0.65 Ln(X) + 5.83	Ln = Natural logarithm
AM Peak Hour:	Ln(T) = 0.61 Ln(X) + 2.24	T = Two-way volume of traffic (total trip-ends)
PM Peak Hour:	Ln(T) = 0.67 Ln(X) + 3.31	X = 1,000 square feet gross leasable area

[4] ITE does not provide a daily trip generation rate for this use. Therefore, the daily trip rate for this use from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* , SANDAG, April 2002 was utilized.

[5] PM trip generation for automobile care center was calculated using the following equation:

		Where:
PM Peak Hour:	T = 2.41 (X) + 11.79	T = Two-way volume of traffic (total trip-ends)
		X = 1,000 square feet occupied gross leasable area

ATTACHMENT C
ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS

Map No.	Project Name	Location	Description	Daily	AM Peak Hour			PM Peak Hour		
					IN	OUT	TOTAL	IN	OUT	TOTAL
City of Culver City [1]										
1	Residential Project	3440 Caroline Avenue	Two (2) new detached residential condominium dwelling units (net addition of one unit)	6	0	0	0	1	0	1
2	Mixed-Use Project	9355 Culver Boulevard	Three story mixed use building consisting of a ground level salon, mezzanine, and office totaling 2,947 s.f., and four residential units on the third floor.	89	4	2	6	3	5	8
3	The Wende Museum	10808 Culver Boulevard	Tenant improvements to convert existing 12,596 s.f. armory building into a museum	57	4	1	5	0	8	8
4	Chapel/Dormitory Project	10775 Deshire Place	4,740 s.f. addition to existing dormitory and replace existing chapel with a 1,660 s.f. chapel.	82	2	4	6	4	3	7
5	Residential Project	4109-4111 Duquesne Avenue	Addition of two (2) residential dwelling units to existing duplex	12	0	1	1	1	0	1
6	Residential Project	4139-4145 Duquesne Avenue	Seven unit condominiums with 15 subterranean parking spaces.	41	1	2	3	3	1	4
7	Residential Project	4058 Madison Avenue	New four unit condominium, 7,422 s.f. total.	41	1	2	3	3	1	4
8	Retail/Restaurant Project	8511 Warner Drive	Five level parking structure with retail/restaurant. 51,520 s.f. of retail/restaurant uses. Parking Structure -307,522 s.f.	3,112	93	70	163	109	103	212
9	Mixed-Use Project [2]	8770 Washington Boulevard	TOD Mixed Use with 31,240 s.f. of retail and restaurant uses and 115 residential units (5 story)	2,914	69	85	154	150	125	275
10	Platform Project [3]	8810-8850 Washington Boulevard & 3920 Landmark Street	New commercial development (38,732 s.f. office, 41,745 s.f. of retail and restaurant)	2,357	71	20	91	100	100	200
11	Mixed-Use Project	8777 Washington Boulevard	Construct 4,500 s.f. of retail and 128,000 s.f. of office use. Demolish existing 12,485 s.f. of retail use and 4,731 s.f. of restaurant use.	30	123	-3	120	-23	92	69
12	Triangle Site - Washington/National TOD [4]	Corner of Washington Boulevard/National Boulevard	Transit oriented development to include 200 d.u, mid-rise apartments, 148-room hotel, 201,000 s.f. office, 24,000 s.f. specialty retail, 10,000 s.f. of high-turnover restaurant & 10,000 s.f. quality restaurant.	4,124	173	83	256	127	174	301
13	The Culver Studios [5]	9336 Washington Boulevard	Net increase of 138,997 s.f. of office and support facilities.	1,564	149	20	169	45	114	159
14	Office & Retail Project	10000 Washington Boulevard	Renovation of existing 9-story office building. Convert ground floor lobby space to office, retail and restaurant space. New construction includes a new stand-alone 3,115 sq. ft. one-story restaurant building and a second floor within the atrium to add 5,500 sq. ft. of office space.	3,612	136	81	217	102	112	214
15	Sony Pictures	10202 Washington Boulevard	New 8-story, 218,450 s.f. office building, a new 4-story, 51,716 s.f. Production Services support building, and expansion of an existing parking structure. Total demolition of 57,642 s.f. Net New square feet is 212,524 s.f.	2,328	308	42	350	54	262	316
16	Sony Pictures	10202 Washington Boulevard	New 22,929 s.f. 4- story office building (net new 9,875 s.f.).	109	13	2	15	3	12	15
17	Union 76	10638 Culver Boulevard	Gas station and convenience store; 2,676 G.S.F.	651	21	20	41	9	45	54
18	Willows School Comprehensive Plan	809 Higuera & 8476 Warner	Phase II & III - increase student enrollment by 100, from 475 to 575	276	50	40	90	3	15	18
19	Culver Center Shopping Center - New restaurant	10799 Washington Blvd	New 2,000 sq. ft. restaurant at existing commercial shopping center	254	12	10	22	12	8	20
20	Parcel B [5]	9300 Culver Blvd	118,000 G.S.F. of office, retail, and restaurant space.	3,702	124	31	155	167	188	355
21	Three unit condominium/ townhome Redevelopment	4241 Duquesne Avenue	New three detached condominium/ townhomes, resulting in two net new residential dwelling units	17	0	1	1	1	1	2
22	Office Building	9919 Jefferson Blvd	New 3-story, 62,558 sq. ft., office and research and development (laboratory) building, as well as a five (5) level parking structure containing 398 parking spaces, and associated site improvements	919	115	16	131	25	124	149
23	Lorcan O'Herlihy Architects	3434 Wesley St	New TOD Mixed Use project with 15 dwelling units, and 14,237sq. ft. of office/gallery on a vacant lot.	278	16	9	25	16	20	36
City of Los Angeles [6]										
24	Apartment [7]	3822 S. Dunn Drive	7-story, 86-Unit Apartment building over ground floor	543	8	34	42	33	17	50
25	Wrapper Office Building Project	5790 W. Jefferson Boulevard	Construct new 10-story 150,761 s.f. office building	1,794	234	32	266	42	205	247
26	Jefferson & La Cienega Mixed Use Project [8]	3221 S. La Cienega Boulevard	Converting existing ABC Lot to a Mixed-Use: 1,218-Unit Apartment, 200,000 s.f. Office, 50,000 s.f. Grocery Store, 30,000 s.f. Retail & 20,000 s.f. Restaurant project.	10,136	319	419	738	467	382	849
27	Mixed-use Apartment & Retail	3425 Motor Avenue	115-unit apartment and 975 s.f. retail. Existing 15 apartment units, 2 single family dwellings and 3,300 s.f. office to be demolished.	999	12	43	55	58	35	93
28	Restaurant & Retail [7]	10612 National Blvd	1,726 s.f. Coffee Shop (Coffee Bean) including 250 s.f. Outdoor Seating. Existing vacant lot.	636	46	38	84	19	12	31
29	Mixed-Use: Apartment & Restaurant [7]	3644 S. Overland Avenue	New Mixed-Use: 92-Unit Apartment & 1,573 sf Restaurant use (110 spaces).	750	17	42	59	38	22	60
30	Venice Fairfax Residential Project	5930 W. Sawyer Street	Construct 60 single-family homes	656	13	39	52	42	24	66
31	Coffee Shop with Drive Through [7]	9829 W. Venice Boulevard	Coffee Bean & Tea Leaf Coffee Shop with Single-Lane Drive Through to replace existing Rally's with Dual-Lane Drive Through.	145	13	12	25	3	2	5
32	Mixed-use Apartment & Retail	9901 Washington Boulevard	131-unit apartment & 12,000 s.f. retail. Existing 16,900 s.f. retail to be removed.	507	8	50	58	42	12	54
33	Mixed-use Apartment, office, retail, and restaurant	10601 Washington Boulevard	126-unit apartment, 23,000 s.f. office, 9,000 s.f. retail, 9,000 s.f. restaurant. Existing 10,000 s.f. office to be removed.	3,595	106	112	218	170	144	314
			RELATED PROJECTS TRIP GENERATION TOTAL	46,336	2,261	1,360	3,621	1,829	2,368	4,197

* Trip generation estimates are based on trip generation rates included in *Trip Generation Manual*, 9th Edition, ITE 2012, unless noted otherwise.

[1] Source: Culver City Planning Division Active Projects List - January 29, 2016.

[2] Trip generation from *Traffic Impact Analysis Report, Proposed Mixed-Use Development (115-Unit Residential and 31,240 Square Foot Retail) Located at 8770 Washington Boulevard in Culver City, California*, Hirsch/Green Transportation Consulting, Inc., July 2010.

[3] Trip generation from *Traffic Study for the Platform at Culver Station Project, Raju Associates* Inc., July 2011.

[4] Trip generation estimates provided by the City of Culver City.

[5] Trip generation from *Culver Studios Modified Comprehensive Plan Update #6, Transportation Analysis Report*, Fehr & Peers, September 2015.

[6] Source: Los Angeles Department of Transportation.

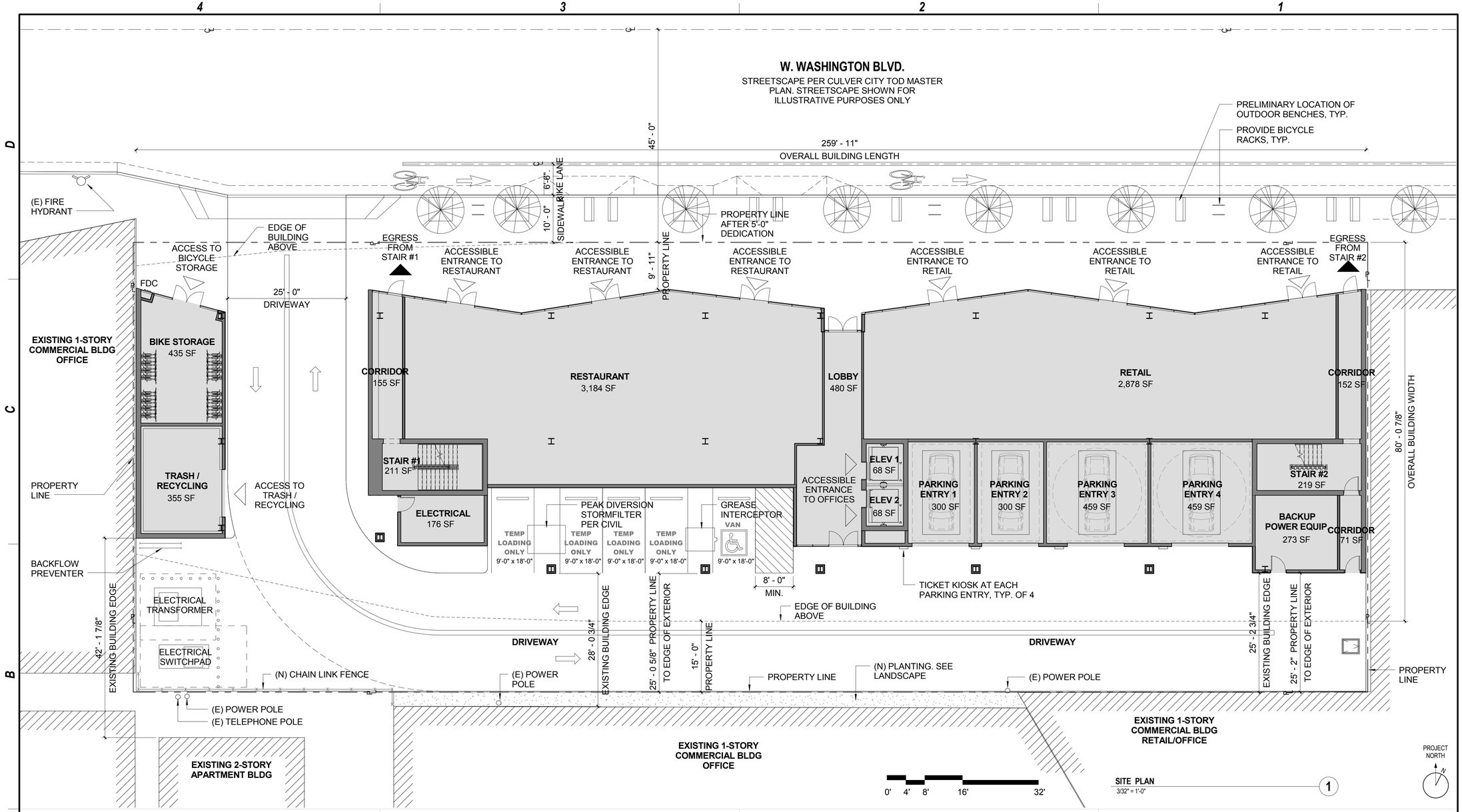
[7] Trip generation totals provided by LADOT, February 2011. Directional distribution based on *Trip Generation Manual,* 9th Edition, ITE 2012.

[8] Trip generation from *Traffic Study for the Jefferson & La Cienega Mixed-Use Development*, Gibson Consulting, Inc., June 2015.

ATTACHMENT D
LIST OF STUDY INTERSECTIONS

#	Intersection		Jurisdiction	Signalized?	Signal System Control
	Northbound/Southbound	Eastbound/Westbound			
1.	Robertson Boulevard	I-10 WB Off-Ramp/Kincardine Avenue	City of Los Angeles	Yes	ATSAC/ATCS
2.	Robertson Boulevard	National Boulevard	City of Los Angeles	Yes	ATSAC/ATCS
3.	National Boulevard	I-10 Eastbound On-Ramp	City of Los Angeles	Yes	ATSAC/ATCS
4.	Bagley Avenue	Venice Boulevard	City of Los Angeles	Yes	ATSAC/ATCS
5.	Culver Boulevard	Venice Boulevard	City of Los Angeles	Yes	ATSAC/ATCS
6.	Robertson Boulevard	Venice Boulevard	City of Los Angeles	Yes	ATSAC/ATCS
7.	National Boulevard	Venice Boulevard	City of Los Angeles	Yes	ATSAC/ATCS
8.	La Cienega Boulevard	Venice Boulevard [1]	City of Los Angeles	Yes	ATSAC/ATCS
9.	Culver Boulevard	Washington Boulevard/Irving Place	Culver City	Yes	ATSAC*
10.	Main Street	Culver Boulevard	Culver City	Yes	ATSAC*
11.	Culver Boulevard	Washington Boulevard	Culver City	Yes	ATSAC*
12.	Ince Boulevard	Washington Boulevard	Culver City	Yes	ATSAC*
13.	Robertson Boulevard/Higuera Street	Washington Boulevard	Culver City	Yes	ATSAC*
14.	Landmark Street	Washington Boulevard	Culver City	Yes	ATSAC*
15.	National Boulevard	Washington Boulevard	Culver City	Yes	ATSAC*
16.	Helms Avenue	Washington Boulevard	Culver City	Yes	ATSAC*
17.	La Cienega Avenue	Washington Boulevard	Culver City	Yes	ATSAC*
18.	La Cienega Boulevard	Washington Boulevard	Culver City	Yes	ATSAC*
19.	Wesley Street	National Boulevard	Culver City	Yes	ATSAC*
20.	Hayden Avenue	National Boulevard	Culver City	Yes	ATSAC*
21.	Jefferson Boulevard	National Boulevard	City of Los Angeles	Yes	ATSAC/ATCS
22.	Jefferson Boulevard	Higuera Street/Rodeo Road	City of Los Angeles	Yes	ATSAC/ATCS
23.	Robertson Boulevard	I-10 EB On-Ramp	City of Los Angeles	No	n/a
24.	Robertson Boulevard	Exposition Bl./I-10 EB Off-Ramp	City of Los Angeles	No	n/a
25.	Wesley Street	Washington Boulevard	Culver City	No (Yes in future)	Future ATSAC*
26.	Cattaraugus Avenue	Washington Boulevard	Culver City	No	n/a

* Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
[1] Los Angeles County Congestion Management Program monitoring location.



SITE PLAN
3/32" = 1'-0"

1

KEYNOTES

ABRAMSON_TEIGER ARCHITECTS
8924 LINDBLADE STREET, CULVER CITY, CA 90232
TEL: 310.838.8998 WWW.ABRAMSONTEIGER.COM

OFFICE BUILDING
8888 WASHINGTON BOULEVARD
CULVER CITY, CA 90232

PROJECT NO: WA15

REVISIONS		
REV. NO.	DATE	DESCRIPTION
-	2016 - 03 - 24	SITE PLAN REVIEW
-	2016 - 11 - 07	SITE PLAN SUBMITTAL
-	2017 - 01 - 18	PLANNING COMMISSION

SITE PLAN

A 1.2

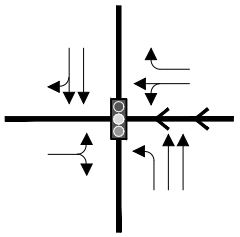
1/18/2017 8:26:41 AM C:\My Revit Projects\2017-01-09_WA15 Site Plan Resubmission_tony.rvt

COPYRIGHT @ABRAMSONTEIGER ARCHITECTS

APPENDIX B

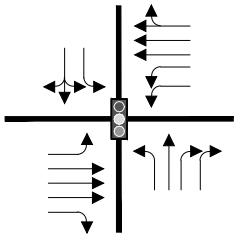
Intersection Lane Configurations

1



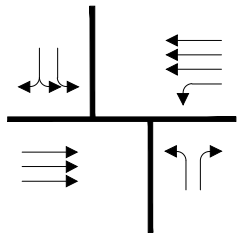
ROBERTSON BOULEVARD &
I-10 WB RAMPS

5



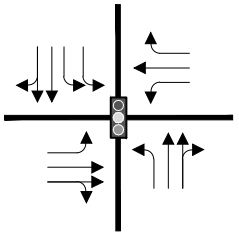
CULVER BOULEVARD &
VENICE BOULEVARD

9



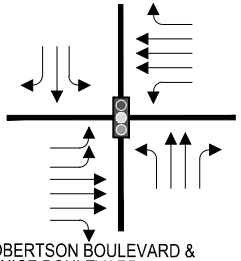
WASHINGTON BOULEVARD &
CULVER BOULEVARD

2



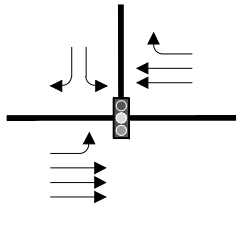
ROBERTSON BOULEVARD &
NATIONAL BOULEVARD

6



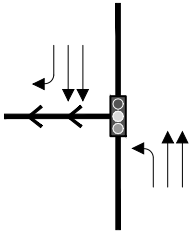
ROBERTSON BOULEVARD &
VENICE BOULEVARD

10



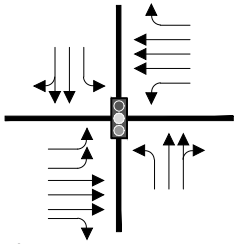
MAIN STREET &
CULVER BOULEVARD

3



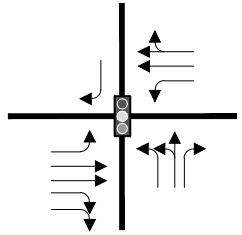
NATIONAL BOULEVARD &
I-10 EB ON-RAMP

7



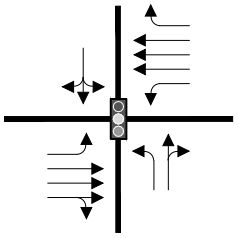
NATIONAL BOULEVARD &
VENICE BOULEVARD

11



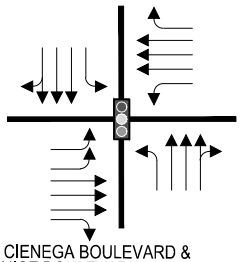
WASHINGTON BOULEVARD &
CULVER BOULEVARD

4



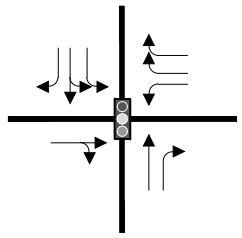
BAGLEY AVENUE/MAIN STREET &
VENICE BOULEVARD

8



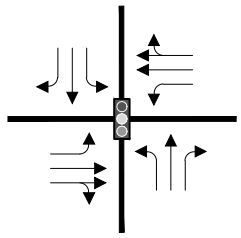
LA CIENEGA BOULEVARD &
VENICE BOULEVARD

12



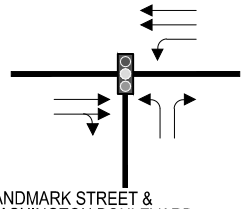
INCE BOULEVARD &
WASHINGTON BOULEVARD

13

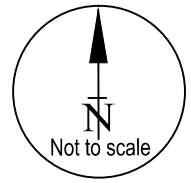


ROBERTSON BOULEVARD &
HIGUERA STREET

14



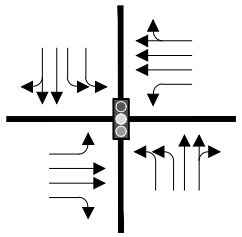
LANDMARK STREET &
WASHINGTON BOULEVARD



APPENDIX B-1
INTERSECTION LANE CONFIGURATIONS

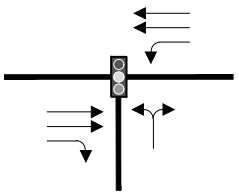
RAJU Associates, Inc.

15



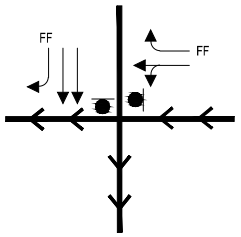
NATIONAL BOULEVARD &
WASHINGTON BOULEVARD

19



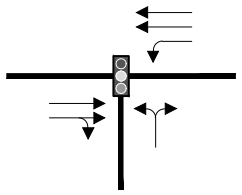
WESLEY STREET &
NATIONAL BOULEVARD

23



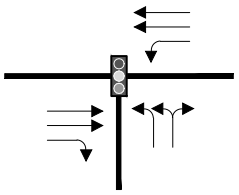
ROBERTSON STREET &
I-10 WB ON-RAMP

16



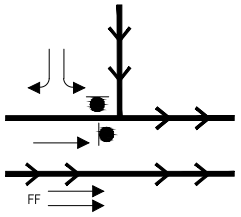
HELMS AVENUE &
WASHINGTON BOULEVARD

20



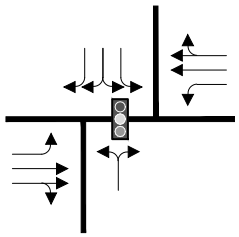
HAYDEN AVENUE &
NATIONAL BOULEVARD

24



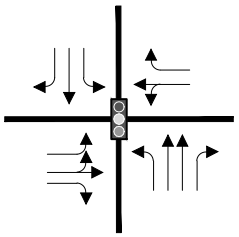
ROBERTSON STREET &
EXPOSITION BOULEVARD

17



LA CIENEGA AVENUE &
WASHINGTON BOULEVARD

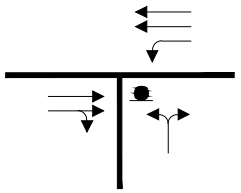
21



JEFFERSON BOULEVARD &
NATIONAL BOULEVARD

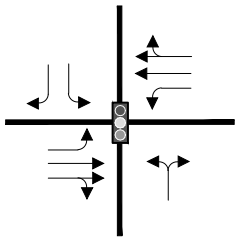
25

Existing Conditions



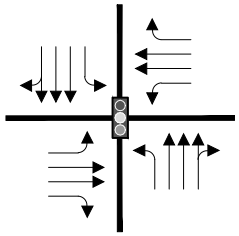
WESLEY STREET &
WASHINGTON BOULEVARD

Future (2018) Conditions



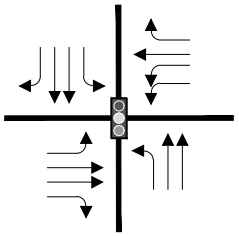
WESLEY STREET &
WASHINGTON BOULEVARD

18



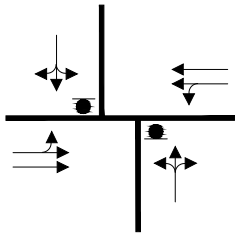
LA CIENEGA BOULEVARD &
WASHINGTON BOULEVARD

22



JEFFERSON BOULEVARD &
HIGUERA STREET/RODEO RD

26



CATTARAUGUS AVENUE &
WASHINGTON BOULEVARD

N
Not to scale

APPENDIX B-2
INTERSECTION LANE CONFIGURATIONS

RAJU Associates, Inc.

APPENDIX C

Traffic Counts

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Robertson Boulevard

East/West I-10 Westbound Off-Ramp/Kincardine Avenue

Day: Thursday Date: September 24, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: AimTD LLC

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	190	274	11	109
BIKES	20	21	5	5
BUSES	46	39	0	12

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	341	8.30	394	8.15	50	7.30	80	7.45
PM PK 15 MIN	243	15.30	393	17.00	62	15.15	226	16.30
AM PK HOUR	1307	7.45	1528	8.45	191	7.30	249	7.00
PM PK HOUR	930	17.00	1511	17.00	174	15.00	856	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	77	971	0	1048
8-9	39	1255	0	1294
9-10	17	1121	0	1138
15-16	33	844	0	877
16-17	39	794	0	833
17-18	46	884	0	930
TOTAL	251	5869	0	6120

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	1266	91	1357
8-9	0	1431	70	1501
9-10	0	1412	64	1476
15-16	0	1386	43	1429
16-17	0	1340	41	1381
17-18	0	1467	44	1511
TOTAL	0	8302	353	8655

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2405	51	16	135	12
2795	24	1	35	0
2614	22	0	5	0
2306	31	28	28	0
2214	17	9	9	0
2441	6	0	3	0
14775	151	54	215	12

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	63	0	103	166
8-9	121	0	35	156
9-10	85	0	31	116
15-16	73	0	101	174
16-17	82	0	87	169
17-18	71	0	64	135
TOTAL	495	0	421	916

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	55	76	118	249
8-9	71	23	87	181
9-10	83	5	120	208
15-16	203	57	404	664
16-17	264	56	513	833
17-18	278	40	522	840
TOTAL	954	257	1764	2975

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
415	190	30	73	7
337	60	3	42	0
324	25	1	4	0
838	308	28	16	0
1002	123	10	16	0
975	66	2	3	0
3891	772	74	154	7

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:					
Thu, Sep 24, 15	LOCATION:	Culver City	PROJECT #:	SC0715
	NORTH & SOUTH:	Robertson	LOCATION #:	9
	EAST & WEST:	Kincardine - I10 WB Off-Ramp	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Robertson			SOUTHBOUND Robertson			EASTBOUND Kincardine			WESTBOUND I10 Westbound Off-Ramp			
	LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 0	EL 0.5	ET X	ER 0.5	WL 0.5	WT 0.5	WR 1	TOTAL
AM	7:00 AM	18	193	0	0	296	18	16	0	15	12	13	34	615
	7:15 AM	12	211	0	0	318	25	9	0	27	11	11	30	654
	7:30 AM	25	251	0	0	326	25	17	0	33	13	26	19	735
	7:45 AM	22	316	0	0	326	23	21	0	28	19	26	35	816
	8:00 AM	19	283	0	0	340	19	32	0	17	16	9	29	764
	8:15 AM	12	314	0	0	378	16	33	0	10	15	7	25	810
	8:30 AM	4	337	0	0	343	18	22	0	4	15	6	14	763
	8:45 AM	4	321	0	0	370	17	34	0	4	25	1	19	795
	9:00 AM	6	270	0	0	336	27	32	0	10	19	2	24	726
	9:15 AM	1	312	0	0	374	10	21	0	5	19	0	19	761
	9:30 AM	4	270	0	0	380	14	17	0	9	26	2	40	762
	9:45 AM	6	269	0	0	322	13	15	0	7	19	1	37	689
	VOLUMES	133	3,347	0	0	4,109	225	269	0	169	209	104	325	8,893
	APPROACH %	4%	96%	0%	0%	95%	5%	61%	0%	38%	33%	16%	51%	
	APP/DEPART	3,482	/	3,941	4,334	/	4,489	439	/	3	638	/	460	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	57	1,250	0	0	1,387	76	108	0	59	65	48	103	3,153
	APPROACH %	4%	96%	0%	0%	95%	5%	65%	0%	35%	30%	22%	48%	
	PEAK HR FACTOR		0.958			0.928			0.852			0.675		0.966
	APP/DEPART	1,307	/	1,461	1,463	/	1,512	167	/	0	216	/	180	0
PM	03:00 PM	8	190	0	0	335	13	22	0	23	43	13	86	733
	3:15 PM	14	212	0	0	349	5	25	0	37	55	13	107	817
	3:30 PM	4	239	0	0	349	11	17	0	29	50	17	97	813
	3:45 PM	7	203	0	0	353	14	9	0	12	55	14	114	781
	4:00 PM	8	207	0	0	369	12	12	0	17	59	11	122	817
	4:15 PM	9	197	0	0	327	9	29	0	24	53	21	119	788
	4:30 PM	11	214	0	0	308	5	20	0	23	71	15	140	807
	4:45 PM	11	176	0	0	336	15	21	0	23	81	9	132	804
	5:00 PM	12	221	0	0	384	9	18	0	15	66	9	131	865
	5:15 PM	12	217	0	0	360	12	18	0	12	75	8	119	833
	5:30 PM	9	231	0	0	362	9	19	0	13	70	9	146	868
	5:45 PM	13	215	0	0	361	14	16	0	24	67	14	126	850
	VOLUMES	118	2,522	0	0	4,193	128	226	0	252	745	153	1,439	9,779
	APPROACH %	4%	95%	0%	0%	97%	3%	47%	0%	53%	32%	7%	62%	
	APP/DEPART	2,642	/	4,187	4,321	/	5,190	479	/	3	2,337	/	399	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	46	884	0	0	1,467	44	71	0	64	278	40	522	3,416
	APPROACH %	5%	95%	0%	0%	97%	3%	53%	0%	47%	33%	5%	62%	
	PEAK HR FACTOR		0.969			0.961			0.844			0.933		0.983
	APP/DEPART	930	/	1,477	1,511	/	1,809	135	/	0	840	/	130	0

Kincardine

NORTH SIDE

Robertson WEST SIDE EAST SIDE **Robertson**

SOUTH SIDE

Kincardine

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Robertson Boulevard

East/West National Boulevard

Day: Thursday Date: September 24, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: AimTD LLC

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	135	308	147	193
BIKES	6	11	9	21
BUSES	28	33	68	29

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	224	8.30	424	8.00	333	8.15	247	7.15
PM PK 15 MIN	183	17.15	465	17.30	302	16.45	179	17.30
AM PK HOUR	825	8.15	1575	7.30	1191	8.00	969	7.15
PM PK HOUR	652	17.00	1803	16.45	1169	16.45	673	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	67	515	43	625
8-9	74	706	31	811
9-10	55	671	40	766
15-16	61	456	74	591
16-17	41	466	84	591
17-18	40	475	137	652
TOTAL	338	3289	409	4036

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	495	781	180	1456
8-9	517	914	125	1556
9-10	508	834	188	1530
15-16	637	808	204	1649
16-17	690	814	211	1715
17-18	638	960	204	1802
TOTAL	3485	5111	1112	9708

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2081	49	3	124	37
2367	14	0	28	0
2296	8	0	18	2
2240	26	17	118	116
2306	5	0	64	75
2454	15	0	73	14
13744	117	20	425	244

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	192	453	215	860
8-9	260	648	283	1191
9-10	255	469	133	857
15-16	198	756	82	1036
16-17	143	871	88	1102
17-18	149	929	80	1158
TOTAL	1197	4126	881	6204

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	159	423	365	947
8-9	130	438	313	881
9-10	154	398	228	780
15-16	97	234	248	579
16-17	100	251	244	595
17-18	87	286	300	673
TOTAL	727	2030	1698	4455

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1807	26	0	14	2
2072	23	0	4	0
1637	18	0	4	0
1615	47	37	3	0
1697	32	7	2	0
1831	34	0	1	0
10659	180	44	28	2

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Culver City	PROJECT #:	SC0715
Thu, Sep 24, 15	NORTH & SOUTH:	Robertson	LOCATION #:	10
	EAST & WEST:	National	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Robertson			SOUTHBOUND Robertson			EASTBOUND National			WESTBOUND National			
	LANES:	NL 1	NT 2	NR 0	SL 2	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	9	97	21	135	168	33	35	75	44	44	92	81	834
	7:15 AM	21	104	7	103	185	47	36	119	54	46	120	81	923
	7:30 AM	23	153	7	135	223	54	53	94	53	37	105	103	1,040
	7:45 AM	14	161	8	122	205	46	68	165	64	32	106	100	1,091
	8:00 AM	25	162	9	145	235	44	54	163	66	35	112	92	1,142
	8:15 AM	17	168	6	133	206	27	76	184	73	27	107	86	1,110
	8:30 AM	11	207	6	114	265	28	60	125	67	28	106	64	1,081
	8:45 AM	21	169	10	125	208	26	70	176	77	40	113	71	1,106
	9:00 AM	19	181	10	140	230	35	67	121	33	47	94	61	1,038
	9:15 AM	9	152	5	131	190	56	71	128	37	31	99	64	973
	9:30 AM	13	177	14	126	232	50	61	101	24	34	105	55	992
	9:45 AM	14	161	11	111	182	47	56	119	39	42	100	48	930
	VOLUMES	196	1,892	114	1,520	2,529	493	707	1,570	631	443	1,259	906	12,260
	APPROACH %	9%	86%	5%	33%	56%	11%	24%	54%	22%	17%	48%	35%	
	APP/DEPART	2,202	/	3,506	4,542	/	3,603	2,908	/	3,206	2,608	/	1,945	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	74	706	31	517	914	125	260	648	283	130	438	313	4,439
	APPROACH %	9%	87%	4%	33%	59%	8%	22%	54%	24%	15%	50%	36%	
	PEAK HR FACTOR		0.905			0.917			0.894			0.922		0.972
	APP/DEPART	811	/	1,280	1,556	/	1,329	1,191	/	1,195	881	/	635	0
PM	03:00 PM	16	88	11	164	177	49	52	149	27	34	51	73	891
	3:15 PM	16	123	13	170	206	55	53	184	18	18	65	55	976
	3:30 PM	16	131	23	158	216	55	44	193	23	25	43	67	994
	3:45 PM	13	114	27	145	209	45	49	230	14	20	75	53	994
	4:00 PM	8	104	19	178	223	54	52	198	17	19	48	57	977
	4:15 PM	8	125	23	166	173	48	36	218	22	26	60	66	971
	4:30 PM	10	114	22	183	200	55	25	205	27	28	68	72	1,009
	4:45 PM	15	123	20	163	218	54	30	250	22	27	75	49	1,046
	5:00 PM	12	108	34	169	235	52	37	234	17	19	73	76	1,066
	5:15 PM	16	134	33	160	234	53	41	245	14	26	70	63	1,089
	5:30 PM	3	122	28	167	243	55	34	223	22	24	74	81	1,076
	5:45 PM	9	111	42	142	248	44	37	227	27	18	69	80	1,054
	VOLUMES	142	1,397	295	1,965	2,582	619	490	2,556	250	284	771	792	12,143
	APPROACH %	8%	76%	16%	38%	50%	12%	15%	78%	8%	15%	42%	43%	
	APP/DEPART	1,834	/	2,678	5,166	/	3,109	3,296	/	4,825	1,847	/	1,531	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	40	475	137	638	960	204	149	929	80	87	286	300	4,285
	APPROACH %	6%	73%	21%	35%	53%	11%	13%	80%	7%	13%	42%	45%	
	PEAK HR FACTOR		0.891			0.969			0.965			0.940		0.984
	APP/DEPART	652	/	923	1,802	/	1,126	1,158	/	1,706	673	/	530	0

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South National Boulevard

East/West I-10 Eastbound On-Ramp

Day: Thursday Date: September 24, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: AimTD LLC

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	219	294	0	0
BIKES	19	21	1	0
BUSES	28	57	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	281	7.15	315	8.00	0	0.00	0	0.00
PM PK 15 MIN	221	17.30	435	17.30	0	0.00	0	0.00
AM PK HOUR	1023	7.00	1165	7.45	0	0.00	0	0.00
PM PK HOUR	809	17.00	1666	16.45	0	0.00	0	0.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	69	954	0	1023
8-9	40	823	0	863
9-10	64	706	0	770
15-16	50	570	0	620
16-17	75	568	0	643
17-18	135	674	0	809
TOTAL	433	4295	0	4728

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	508	485	993
8-9	0	714	441	1155
9-10	0	629	420	1049
15-16	0	985	457	1442
16-17	0	903	684	1587
17-18	0	915	701	1616
TOTAL	0	4654	3188	7842

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2016	0	0	3	0
2018	0	0	11	0
1819	0	0	20	0
2062	0	0	35	1
2230	2	0	35	0
2425	0	0	12	0
12570	2	0	116	1

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
15-16	0	0	0	0
16-17	0	0	0	0
17-18	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
15-16	0	0	0	0
16-17	0	0	0	0
17-18	0	0	0	0
TOTAL	0	0	0	0

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
0	53	0	3	0
0	21	0	2	0
0	18	0	3	0
0	47	4	17	3
0	37	2	9	0
0	37	0	7	1
0	213	6	41	4

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:					
Thu, Sep 24, 15	LOCATION:	Culver City	PROJECT #:	SC0715	
	NORTH & SOUTH:	National	LOCATION #:	11	
	EAST & WEST:	I-10 Eastbound On-Ramp	CONTROL:	SIGNAL	

NOTES:

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

		NORTHBOUND National			SOUTHBOUND National			EASTBOUND I-10 Eastbound On-Ramp			WESTBOUND I-10 Eastbound On-Ramp			
	LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 1	EL X	ET X	ER X	WL X	WT X	WR X	TOTAL
AM	7:00 AM	29	248	0	0	78	139	0	0	0	0	0	0	494
	7:15 AM	22	259	0	0	105	137	0	0	0	0	0	0	523
	7:30 AM	9	234	0	0	144	95	0	0	0	0	0	0	482
	7:45 AM	9	213	0	0	181	114	0	0	0	0	0	0	517
	8:00 AM	7	239	0	0	196	119	0	0	0	0	0	0	561
	8:15 AM	10	208	0	0	192	118	0	0	0	0	0	0	528
	8:30 AM	9	192	0	0	156	89	0	0	0	0	0	0	446
	8:45 AM	14	184	0	0	170	115	0	0	0	0	0	0	483
	9:00 AM	14	175	0	0	196	90	0	0	0	0	0	0	475
	9:15 AM	13	182	0	0	174	103	0	0	0	0	0	0	472
	9:30 AM	18	167	0	0	126	122	0	0	0	0	0	0	433
	9:45 AM	19	182	0	0	133	105	0	0	0	0	0	0	439
	VOLUMES	173	2,483	0	0	1,851	1,346	0	0	0	0	0	0	5,856
	APPROACH %	7%	93%	0%	0%	58%	42%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	2,656	/	2,484	3,198	/	1,851	0	/	0	0	/	1,519	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	35	894	0	0	713	446	0	0	0	0	0	0	2,088
	APPROACH %	4%	96%	0%	0%	62%	38%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.944			0.920			0.000			0.000		0.930
	APP/DEPART	929	/	894	1,159	/	713	0	/	0	0	/	481	0
PM	03:00 PM	12	176	0	0	222	102	0	0	0	0	0	0	512
	3:15 PM	14	125	0	0	255	114	0	0	0	0	0	0	508
	3:30 PM	10	127	0	0	270	114	0	0	0	0	0	0	521
	3:45 PM	14	142	0	0	238	127	0	0	0	0	0	0	521
	4:00 PM	22	121	0	0	226	170	0	0	0	0	0	0	539
	4:15 PM	19	142	0	0	220	159	0	0	0	0	0	0	540
	4:30 PM	13	153	0	0	207	177	0	0	0	0	0	0	550
	4:45 PM	21	152	0	0	250	178	0	0	0	0	0	0	601
	5:00 PM	23	169	0	0	234	143	0	0	0	0	0	0	569
	5:15 PM	30	166	0	0	222	204	0	0	0	0	0	0	622
	5:30 PM	41	180	0	0	255	180	0	0	0	0	0	0	656
	5:45 PM	41	159	0	0	204	174	0	0	0	0	0	0	578
	VOLUMES	260	1,812	0	0	2,803	1,842	0	0	0	0	0	0	6,723
	APPROACH %	13%	87%	0%	0%	60%	40%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	2,074	/	1,815	4,646	/	2,805	0	/	0	0	/	2,101	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	115	667	0	0	961	705	0	0	0	0	0	0	2,448
	APPROACH %	15%	85%	0%	0%	58%	42%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.885			0.957			0.000			0.000		0.932
	APP/DEPART	782	/	667	1,666	/	961	0	/	0	0	/	820	0

National

NORTH SIDE

I-10 Eastbound On-Ramp WEST SIDE EAST SIDE **I-10 Eastbound On-Ramp**

SOUTH SIDE

National

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Bagley Avenue

East/West Venice Boulevard

Day: Thursday Date: September 24, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: AimTD LLC

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	35	35	309	370
BIKES	35	48	94	150
BUSES	2	26	77	97

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	104	8.30	122	8.00	364	8.30	442	9.30
PM PK 15 MIN	57	15.30	111	17.15	409	17.45	464	17.15
AM PK HOUR	374	7.45	448	8.00	1422	8.00	1607	9.00
PM PK HOUR	203	16.15	414	16.30	1412	17.00	1760	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	51	191	43	285
8-9	66	251	29	346
9-10	43	174	19	236
15-16	46	95	33	174
16-17	39	142	14	195
17-18	50	112	37	199
TOTAL	295	965	175	1435

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	35	126	87	248
8-9	63	244	141	448
9-10	33	177	119	329
15-16	49	160	73	282
16-17	53	244	90	387
17-18	63	268	70	401
TOTAL	296	1219	580	2095

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
533	43	3	40	1
794	36	0	39	1
565	30	0	37	7
456	56	1	49	2
582	42	3	55	2
600	56	0	71	1
3530	263	7	291	14

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	64	1087	19	1170
8-9	59	1337	26	1422
9-10	96	1029	24	1149
15-16	94	1211	75	1380
16-17	103	1163	104	1370
17-18	116	1236	60	1412
TOTAL	532	7063	308	7903

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	35	1297	29	1361
8-9	52	1431	30	1513
9-10	44	1533	30	1607
15-16	95	1282	48	1425
16-17	104	1315	40	1459
17-18	111	1604	45	1760
TOTAL	441	8462	222	9125

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
2531	28	0	41	1
2935	38	2	75	3
2756	30	0	67	1
2805	49	3	66	4
2829	51	7	60	4
3172	85	8	67	2
17028	281	20	376	15

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:					
Thu, Sep 24, 15	LOCATION:	Culver City	PROJECT #:	SC0715
	NORTH & SOUTH:	Bagley	LOCATION #:	12
	EAST & WEST:	Venice	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Bagley			SOUTHBOUND Bagley			EASTBOUND Venice			WESTBOUND Venice			
	LANES:	NL 1	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
AM	7:00 AM	7	21	17	5	14	21	9	218	4	3	318	4	641
	7:15 AM	10	22	9	8	21	19	11	236	3	9	356	5	709
	7:30 AM	9	79	9	8	51	22	21	326	7	9	309	10	860
	7:45 AM	25	69	8	14	40	25	23	307	5	14	314	10	854
	8:00 AM	11	63	8	21	64	37	14	342	4	12	339	9	924
	8:15 AM	26	51	9	15	63	32	16	327	8	15	341	9	912
	8:30 AM	21	74	9	15	51	36	17	338	9	13	372	6	961
	8:45 AM	8	63	3	12	66	36	12	330	5	12	379	6	932
	9:00 AM	10	58	4	12	58	39	23	285	6	5	345	7	852
	9:15 AM	10	47	4	11	43	33	29	275	6	12	386	8	864
	9:30 AM	15	36	5	6	46	31	22	252	10	10	424	8	865
	9:45 AM	8	33	6	4	30	16	22	217	2	17	378	7	740
	VOLUMES	160	616	91	131	547	347	219	3,453	69	131	4,261	89	10,114
	APPROACH %	18%	71%	10%	13%	53%	34%	6%	92%	2%	3%	95%	2%	
	APP/DEPART	867	/	859	1,025	/	726	3,741	/	3,695	4,481	/	4,834	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	66	251	29	63	244	141	59	1,337	26	52	1,431	30	3,729
	APPROACH %	19%	73%	8%	14%	54%	31%	4%	94%	2%	3%	95%	2%	
	PEAK HR FACTOR		0.832			0.918			0.977			0.953		0.970
	APP/DEPART	346	/	326	448	/	313	1,422	/	1,437	1,513	/	1,653	0
PM	03:00 PM	10	19	13	14	29	18	23	347	24	14	352	18	881
	3:15 PM	11	18	6	4	42	23	28	287	23	34	296	10	782
	3:30 PM	14	35	8	16	44	18	21	259	12	29	292	11	759
	3:45 PM	11	23	6	15	45	14	22	318	16	18	342	9	839
	4:00 PM	7	31	7	9	61	21	26	277	29	24	328	10	830
	4:15 PM	9	45	1	12	59	15	23	309	17	29	324	8	851
	4:30 PM	11	36	3	14	58	32	19	273	25	21	313	11	816
	4:45 PM	12	30	3	18	66	22	35	304	33	30	350	11	914
	5:00 PM	10	34	9	21	59	13	28	293	25	26	342	14	874
	5:15 PM	12	24	9	14	75	22	31	272	11	31	416	17	934
	5:30 PM	15	29	5	10	66	22	27	300	16	26	420	6	942
	5:45 PM	13	25	14	18	68	13	30	371	8	28	426	8	1,022
	VOLUMES	135	349	84	165	672	233	313	3,610	239	310	4,201	133	10,444
	APPROACH %	24%	61%	15%	15%	63%	22%	8%	87%	6%	7%	90%	3%	
	APP/DEPART	568	/	714	1,070	/	1,140	4,162	/	3,940	4,644	/	4,650	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	50	112	37	63	268	70	116	1,236	60	111	1,604	45	3,772
	APPROACH %	25%	56%	19%	16%	67%	17%	8%	88%	4%	6%	91%	3%	
	PEAK HR FACTOR		0.939			0.903			0.863			0.948		0.923
	APP/DEPART	199	/	251	401	/	421	1,412	/	1,354	1,760	/	1,746	0

Bagley

NORTH SIDE

Venice WEST SIDE EAST SIDE **Venice**

SOUTH SIDE

Bagley

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Culver Boulevard

East/West Venice Boulevard

Day: Thursday Date: October 15, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: AimTD LLC

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	107	28	330	377
BIKES	6	53	180	122
BUSES	4	1	100	99

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	210	9.00	60	8.45	367	8.00	541	9.45
PM PK 15 MIN	248	17.45	81	17.30	339	15.00	578	17.30
AM PK HOUR	769	8.15	215	8.15	1352	7.30	2054	9.00
PM PK HOUR	933	17.00	289	16.00	1298	15.00	2098	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	27	40	604	671
8-9	36	43	676	755
9-10	54	42	629	725
15-16	65	53	731	849
16-17	68	41	789	898
17-18	75	47	811	933
TOTAL	325	266	4240	4831

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	110	26	17	153
8-9	142	37	29	208
9-10	118	37	34	189
15-16	193	39	23	255
16-17	240	25	24	289
17-18	229	35	23	287
TOTAL	1032	199	150	1381

TOTAL

N-S
824
963
914
1104
1187
1220
6212

XING S/L

Ped	Sch
64	0
52	0
59	0
75	0
88	0
106	0
444	0

XING N/L

Ped	Sch
6	0
16	0
13	0
32	0
22	0
50	0
139	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	14	1095	8	1117
8-9	20	1285	13	1318
9-10	30	1052	21	1103
15-16	19	1243	36	1298
16-17	15	1217	17	1249
17-18	9	1190	17	1216
TOTAL	107	7082	112	7301

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	249	1380	91	1720
8-9	324	1523	140	1987
9-10	345	1556	153	2054
15-16	342	1375	144	1861
16-17	370	1361	123	1854
17-18	377	1593	128	2098
TOTAL	2007	8788	779	11574

TOTAL

E-W
2837
3305
3157
3159
3103
3314
18875

XING W/L

Ped	Sch
31	0
29	0
81	0
79	0
95	0
92	0
407	0

XING E/L

Ped	Sch
0	0
0	0
1	0
0	0
0	0
0	0
1	0

INTERSECTION TURNING MOVEMENT COUNTS

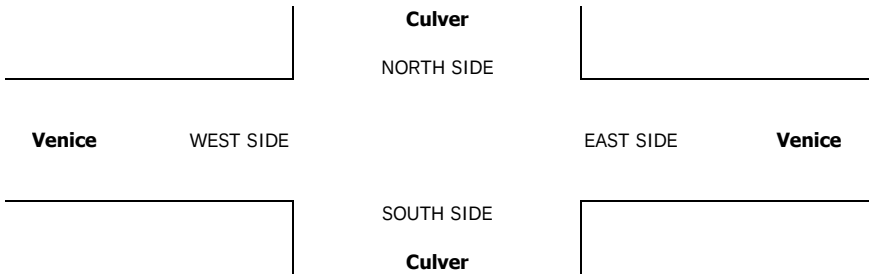
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:				
Thu, Oct 15, 15	LOCATION:	Culver	PROJECT #:	SC0743
	NORTH & SOUTH:	Culver	LOCATION #:	1
	EAST & WEST:	Venice	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND Culver			SOUTHBOUND Culver			EASTBOUND Venice			WESTBOUND Venice			
	LANES:	NL 1	NT 1	NR 2	SL 1	ST 0.5	SR 0.5	EL 1	ET 3	ER 0	WL 2	WT 3	WR 0	TOTAL
AM	7:00 AM	3	5	111	20	5	6	1	216	1	44	307	25	744
	7:15 AM	11	8	160	25	7	3	5	229	3	76	350	24	901
	7:30 AM	8	14	164	30	7	3	5	357	3	61	360	25	1,037
	7:45 AM	5	13	169	35	7	5	3	293	1	68	363	17	979
	8:00 AM	7	9	180	32	5	5	3	359	5	71	420	33	1,129
	8:15 AM	9	12	154	30	11	11	8	314	1	87	379	30	1,046
	8:30 AM	12	7	190	40	8	6	4	317	3	75	351	42	1,055
	8:45 AM	8	15	152	40	13	7	5	295	4	91	373	35	1,038
	9:00 AM	14	15	181	28	9	12	7	280	6	88	360	33	1,033
	9:15 AM	11	4	154	28	10	6	9	286	3	83	408	37	1,039
	9:30 AM	15	13	148	28	4	10	5	226	4	88	379	37	957
	9:45 AM	14	10	146	34	14	6	9	260	8	86	409	46	1,042
	VOLUMES	117	125	1,909	370	100	80	64	3,432	42	918	4,459	384	12,000
	APPROACH %	5%	6%	89%	67%	18%	15%	2%	97%	1%	16%	77%	7%	
	APP/DEPART	2,151	/	572	550	/	1,060	3,538	/	5,712	5,761	/	4,656	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	36	43	676	142	37	29	20	1,285	13	324	1,523	140	4,268
	APPROACH %	5%	6%	90%	68%	18%	14%	2%	97%	1%	16%	77%	7%	
	PEAK HR FACTOR		0.903			0.867			0.898			0.948		0.945
	APP/DEPART	755	/	202	208	/	373	1,318	/	2,104	1,987	/	1,589	0
PM	03:00 PM	20	9	168	44	13	8	10	321	8	80	329	34	1,044
	3:15 PM	15	16	176	45	12	4	4	300	7	80	337	33	1,029
	3:30 PM	17	18	192	55	9	3	2	299	15	94	360	39	1,103
	3:45 PM	13	10	195	49	5	8	3	323	6	88	349	38	1,087
	4:00 PM	21	5	203	60	7	5	3	309	7	91	322	27	1,060
	4:15 PM	16	9	185	55	5	7	5	320	4	88	361	34	1,089
	4:30 PM	14	16	215	64	5	6	3	274	5	81	342	40	1,065
	4:45 PM	17	11	186	61	8	6	4	314	1	110	336	22	1,076
	5:00 PM	20	9	180	53	10	3	1	321	4	104	352	22	1,079
	5:15 PM	21	16	210	50	6	10	1	281	3	77	369	33	1,077
	5:30 PM	22	7	200	67	10	4	4	284	6	103	435	40	1,182
	5:45 PM	12	15	221	59	9	6	3	304	4	93	437	33	1,196
	VOLUMES	208	141	2,331	662	99	70	43	3,650	70	1,089	4,329	395	13,087
	APPROACH %	8%	5%	87%	80%	12%	8%	1%	97%	2%	19%	74%	7%	
	APP/DEPART	2,680	/	579	831	/	1,256	3,763	/	6,646	5,813	/	4,606	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	75	47	811	229	35	23	9	1,190	17	377	1,593	128	4,534
	APPROACH %	8%	5%	87%	80%	12%	8%	1%	98%	1%	18%	76%	6%	
	PEAK HR FACTOR		0.941			0.886			0.933			0.907		0.948
	APP/DEPART	933	/	184	287	/	428	1,216	/	2,231	2,098	/	1,691	0



Turning Movement Count Report AM

Location ID: 5
North/South: Robertson Blvd
East/West: Venice Blvd

Date: 02/18/15
City: Culver City, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	53	36	30	60	234	7	8	64	10	5	242	65	814
7:15	69	29	39	54	222	7	9	94	21	6	286	64	900
7:30	70	36	48	44	274	6	7	91	20	12	349	89	1046
7:45	71	67	69	34	285	5	8	90	25	9	322	90	1075
8:00	77	69	64	53	281	12	7	98	20	9	390	61	1141
8:15	68	57	59	36	317	13	9	90	28	9	408	98	1192
8:30	101	50	59	60	310	13	8	100	17	19	404	98	1239
8:45	97	73	59	51	344	10	16	85	15	23	408	86	1267
9:00	102	70	54	38	336	9	9	101	19	12	350	89	1189
9:15	95	53	45	75	324	14	13	79	14	18	342	88	1160
9:30	77	60	56	99	267	16	8	75	15	18	331	71	1093
9:45	98	49	52	60	329	6	21	69	17	24	300	63	1088

Total Volume:	978	649	634	664	3523	118	123	1036	221	164	4132	962	13204
Approach %	43%	29%	28%	15%	82%	3%	9%	75%	16%	3%	79%	18%	

Peak Hr Begin:	8:15				1407								
PHV	368	250	231	185	1307	45	42	376	79	63	1570	371	4887
PHF	0.927			0.949			0.963			0.962			0.964

City Count, LLC.
www.citycount.com

Turning Movement Count Report PM

Location ID: 5
North/South: Robertson Blvd
East/West: Venice Blvd

Date: 02/18/15
City: Culver City, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	70	54	59	25	278	10	10	67	20	26	437	79	1135
15:15	79	33	43	20	237	6	11	62	12	37	402	70	1012
15:30	78	46	60	21	297	12	12	48	10	31	440	81	1136
15:45	88	39	56	22	241	6	11	65	22	23	447	74	1094
16:00	89	41	52	21	242	6	12	63	18	33	441	68	1086
16:15	64	45	56	20	263	9	14	46	20	33	468	79	1117
16:30	82	35	61	19	246	9	11	87	17	24	445	97	1133
16:45	75	30	51	24	275	13	15	75	22	29	367	98	1074
17:00	71	32	41	23	299	10	15	84	15	21	442	95	1148
17:15	86	46	41	33	301	15	13	86	23	25	485	101	1255
17:30	104	39	36	19	344	17	17	90	27	28	422	119	1262
17:45	83	45	42	30	292	19	17	86	32	23	382	131	1182

Total Volume:	969	485	598	277	3315	132	158	859	238	333	5178	1092	13634
Approach %	47%	24%	29%	7%	89%	4%	13%	68%	19%	5%	78%	17%	

Peak Hr Begin:	17:00				1436								
PHV	344	162	160	105	1236	61	62	346	97	97	1731	446	4847
PHF	0.930			0.922			0.935			0.930			0.960

City Count, LLC.
www.citycount.com

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South National Boulevard

East/West Venice Boulevard

Day: Thursday Date: September 24, 2015 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: AimTD LLC

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	258	184	402	378
BIKES	23	34	85	160
BUSES	22	45	159	85

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	314	7.00	205	9.00	519	8.00	444	9.30
PM PK 15 MIN	236	17.00	301	15.30	545	17.45	393	17.00
AM PK HOUR	1113	7.00	751	7.45	1991	8.00	1583	9.00
PM PK HOUR	895	17.00	1031	16.45	2108	15.45	1471	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	297	792	24	1113
8-9	225	625	27	877
9-10	203	575	38	816
15-16	159	447	57	663
16-17	200	475	82	757
17-18	199	603	93	895
TOTAL	1283	3517	321	5121

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	53	371	60	484
8-9	104	557	80	741
9-10	91	455	83	629
15-16	180	681	76	937
16-17	118	713	61	892
17-18	140	771	55	966
TOTAL	686	3548	415	4649

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1597	93	35	86	56
1618	47	0	55	0
1445	38	0	66	6
1600	59	13	97	43
1649	64	5	73	18
1861	40	3	76	14
9770	341	56	453	137

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	144	1073	357	1574
8-9	141	1441	409	1991
9-10	126	1173	361	1660
15-16	131	1555	296	1982
16-17	140	1603	322	2065
17-18	163	1539	307	2009
TOTAL	845	8384	2052	11281

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	54	1272	96	1422
8-9	69	1233	80	1382
9-10	64	1405	114	1583
15-16	62	1041	55	1158
16-17	69	1192	49	1310
17-18	89	1324	58	1471
TOTAL	407	7467	452	8326

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
2996	118	47	113	57
3373	63	1	41	3
3243	34	2	37	0
3140	94	78	104	53
3375	75	34	78	19
3480	72	32	46	12
19607	456	194	419	144

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Culver City	PROJECT #:	SC0715
Thu, Sep 24, 15	NORTH & SOUTH:	National	LOCATION #:	13
	EAST & WEST:	Venice	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND National			SOUTHBOUND National			EASTBOUND Venice			WESTBOUND Venice			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 2	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL
AM	7:00 AM	88	220	6	6	61	13	43	215	72	13	338	34	1,109
	7:15 AM	86	207	3	11	69	12	36	259	86	16	332	27	1,144
	7:30 AM	67	192	5	18	89	22	37	271	80	11	283	21	1,096
	7:45 AM	56	173	10	18	152	13	28	328	119	14	319	14	1,244
	8:00 AM	50	185	13	27	154	21	29	381	109	19	319	31	1,338
	8:15 AM	59	169	7	24	162	15	32	344	106	15	297	10	1,240
	8:30 AM	71	137	4	25	116	24	31	345	108	19	317	17	1,214
	8:45 AM	45	134	3	28	125	20	49	371	86	16	300	22	1,199
	9:00 AM	49	131	7	27	147	31	35	330	101	16	308	29	1,211
	9:15 AM	53	163	9	26	123	23	28	308	114	14	310	18	1,189
	9:30 AM	46	129	9	21	88	14	42	279	68	17	395	32	1,140
	9:45 AM	55	152	13	17	97	15	21	256	78	17	392	35	1,148
	VOLUMES	725	1,992	89	248	1,383	223	411	3,687	1,127	187	3,910	290	14,272
	APPROACH %	26%	71%	3%	13%	75%	12%	8%	71%	22%	4%	89%	7%	
	APP/DEPART	2,806	/	2,683	1,854	/	2,697	5,225	/	4,024	4,387	/	4,868	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	236	664	34	94	584	73	120	1,398	442	67	1,252	72	5,036
	APPROACH %	25%	71%	4%	13%	78%	10%	6%	71%	23%	5%	90%	5%	
	PEAK HR FACTOR		0.942			0.929			0.944			0.942		0.941
	APP/DEPART	934	/	851	751	/	1,093	1,960	/	1,526	1,391	/	1,566	0
PM	03:00 PM	28	134	17	37	166	15	33	362	70	18	283	15	1,178
	3:15 PM	42	78	15	40	145	19	32	375	87	13	222	11	1,079
	3:30 PM	41	114	15	55	221	25	30	396	70	19	274	12	1,272
	3:45 PM	48	121	10	48	149	17	36	422	69	12	262	17	1,211
	4:00 PM	44	103	25	29	173	19	46	410	67	18	289	12	1,235
	4:15 PM	53	121	21	33	158	21	33	422	75	21	296	10	1,264
	4:30 PM	51	135	16	24	173	10	32	403	93	19	310	14	1,280
	4:45 PM	52	116	20	32	209	11	29	368	87	11	297	13	1,245
	5:00 PM	50	166	20	33	212	15	30	396	92	21	351	21	1,407
	5:15 PM	46	136	25	31	206	14	42	328	90	22	329	14	1,283
	5:30 PM	51	160	25	41	210	17	40	385	61	28	340	11	1,369
	5:45 PM	52	141	23	35	143	9	51	430	64	18	304	12	1,282
	VOLUMES	558	1,525	232	438	2,165	192	434	4,697	925	220	3,557	162	15,105
	APPROACH %	24%	66%	10%	16%	77%	7%	7%	78%	15%	6%	90%	4%	
	APP/DEPART	2,315	/	2,102	2,795	/	3,298	6,056	/	5,378	3,939	/	4,327	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	199	603	93	140	771	55	163	1,539	307	89	1,324	58	5,341
	APPROACH %	22%	67%	10%	14%	80%	6%	8%	77%	15%	6%	90%	4%	
	PEAK HR FACTOR		0.948			0.901			0.922			0.936		0.949
	APP/DEPART	895	/	818	966	/	1,162	2,009	/	1,776	1,471	/	1,585	0

National

NORTH SIDE

Venice WEST SIDE EAST SIDE **Venice**

SOUTH SIDE

National

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-001

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

AM

NS/EW Streets:	La Cienega Blvd			La Cienega Blvd			Venice Blvd			Venice Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	2	3	0	1	3.5	0.5	
7:00 AM	38	377	23	9	196	37	52	198	16	26	390	6	1368
7:15 AM	46	414	18	6	264	42	52	248	19	23	365	3	1500
7:30 AM	41	463	17	12	216	27	75	248	11	49	366	4	1529
7:45 AM	49	403	9	20	269	47	65	292	23	48	317	9	1551
8:00 AM	42	474	20	31	315	45	68	264	33	57	296	12	1657
8:15 AM	48	385	16	27	330	58	68	322	27	43	283	27	1634
8:30 AM	39	416	11	35	219	55	76	302	27	40	323	29	1572
8:45 AM	43	358	10	25	296	84	62	299	40	39	332	17	1605
9:00 AM	42	384	13	23	259	66	69	278	39	36	363	24	1596
9:15 AM	47	300	7	14	286	54	65	236	32	44	346	16	1447
9:30 AM	37	322	15	11	251	67	59	227	25	41	371	12	1438
9:45 AM	48	241	10	17	327	75	54	225	33	38	306	6	1380
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	520	4537	169	230	3228	657	765	3139	325	484	4058	165	18277
APPROACH %'s :	9.95%	86.82%	3.23%	5.59%	78.44%	15.97%	18.09%	74.23%	7.69%	10.28%	86.21%	3.51%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	172	1633	57	118	1160	242	274	1187	127	179	1234	85	6468
PEAK HR FACTOR :		0.868			0.916			0.952			0.955		0.976

CONTROL : Sginalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-001

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

PM

NS/EW Streets:	La Cienega Blvd			La Cienega Blvd			Venice Blvd			Venice Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	2	3	0	1	3.5	0.5	
3:00 PM	17	224	13	10	298	51	73	345	48	39	218	3	1339
3:15 PM	15	233	10	18	284	57	73	325	39	38	232	4	1328
3:30 PM	20	217	19	20	310	62	76	350	43	49	250	11	1427
3:45 PM	19	214	11	19	370	59	58	305	41	39	201	6	1342
4:00 PM	12	218	18	14	310	43	60	356	30	30	233	6	1330
4:15 PM	24	191	13	12	326	52	68	331	42	39	225	5	1328
4:30 PM	14	246	19	23	335	48	66	367	40	48	249	3	1458
4:45 PM	22	251	22	13	334	61	70	329	42	46	248	3	1441
5:00 PM	25	239	18	10	334	44	82	362	48	46	272	6	1486
5:15 PM	27	233	20	18	399	47	70	340	33	36	261	15	1499
5:30 PM	17	238	15	19	322	47	64	365	29	44	310	5	1475
5:45 PM	19	216	15	26	319	60	71	304	44	44	257	10	1385
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	231	2720	193	202	3941	631	831	4079	479	498	2956	77	16838
APPROACH %'s :	7.35%	86.51%	6.14%	4.23%	82.55%	13.22%	15.42%	75.69%	8.89%	14.10%	83.72%	2.18%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	91	961	75	60	1389	199	286	1396	152	172	1091	29	5901
PEAK HR FACTOR :		0.955			0.888			0.932			0.900		0.984

CONTROL : Sginalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

La Cienega Blvd and Venice Blvd , Los Angeles

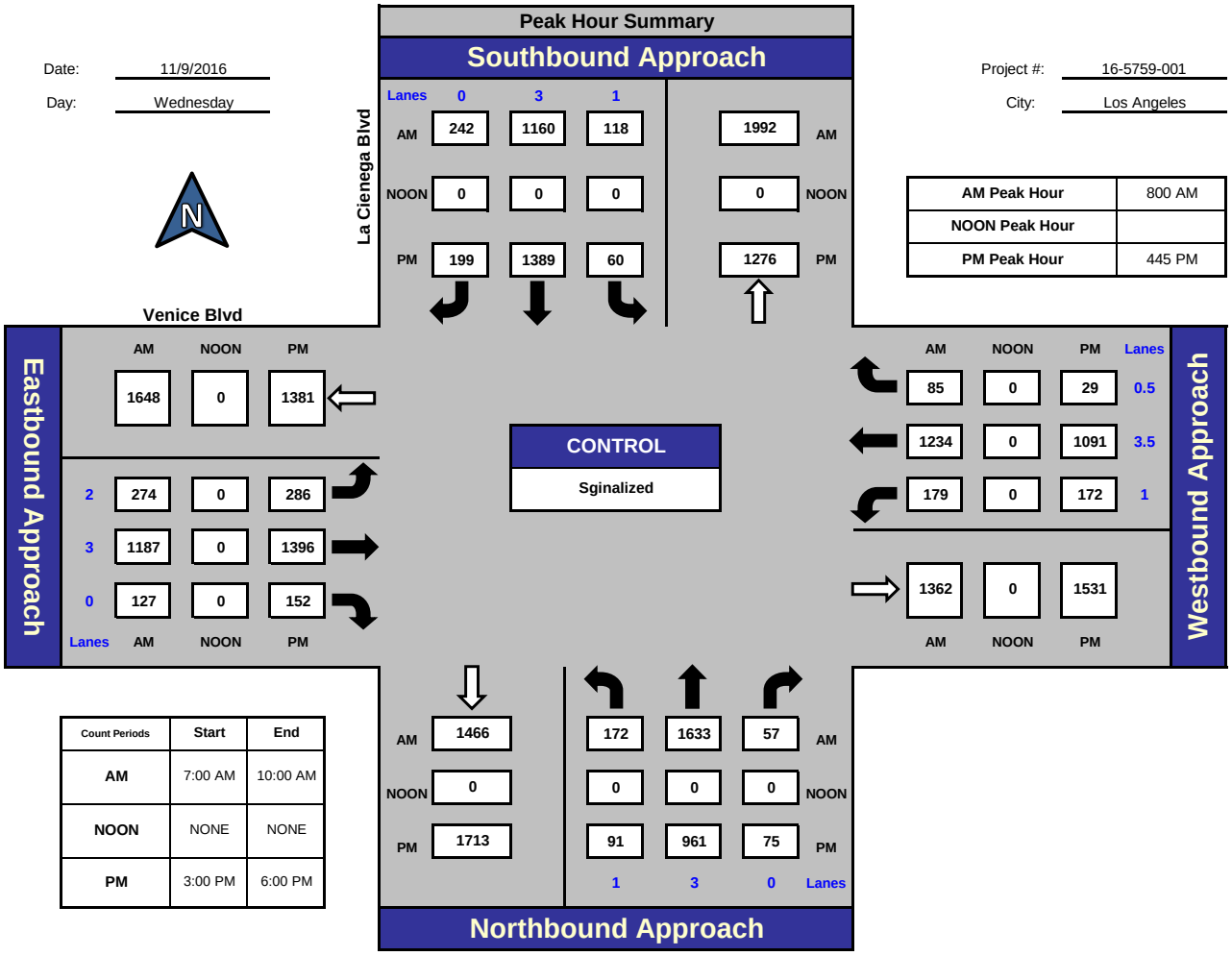
Date: 11/9/2016

Day: Wednesday

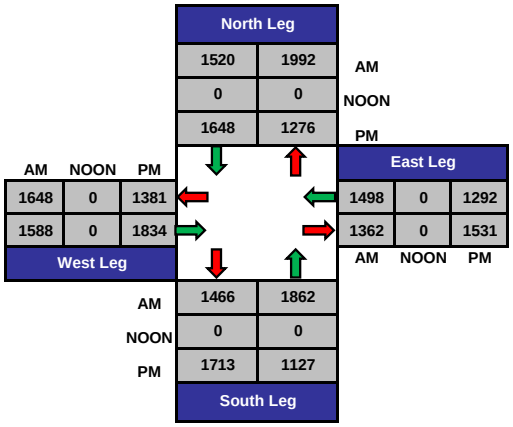
Project #: 16-5759-001

City: Los Angeles

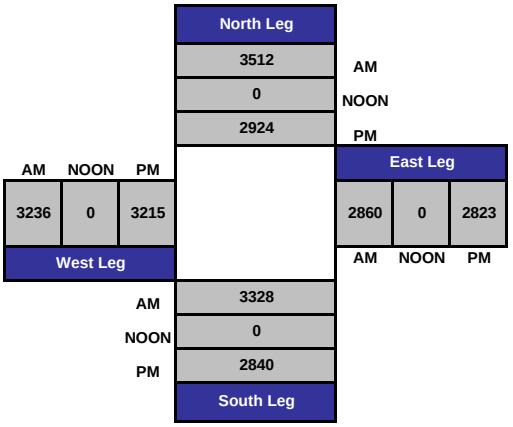
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM



Total Ins & Outs



Total Volume Per Leg



INTERSECTION TURNING MOVEMENT COUNTS

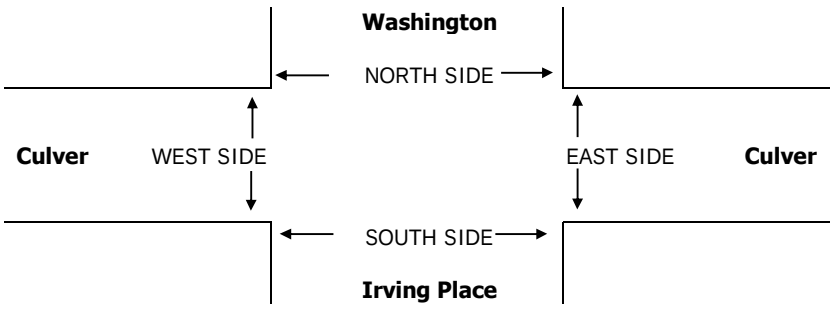
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:					
Tue, Apr 14, 15	LOCATION:	Culver City	PROJECT #:	SC0575	
	NORTH & SOUTH:	Washington-Irving Place	LOCATION #:	76	
	EAST & WEST:	Culver	CONTROL:	SIGNAL	

NOTES:

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

		NORTHBOUND Irving Place			SOUTHBOUND Washington			EASTBOUND Culver			WESTBOUND Culver			
	LANES:	NL 1	NT X	NR 1	SL 2	ST X	SR 0	EL X	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
AM	7:00 AM	8	0	15	57	0	5	0	203	0	4	282	0	574
	7:15 AM	6	0	8	84	0	3	0	265	0	3	349	0	718
	7:30 AM	7	0	13	110	0	0	0	294	0	7	411	0	842
	7:45 AM	19	0	15	141	0	2	0	287	0	10	476	0	950
	8:00 AM	32	0	24	152	0	8	0	269	0	9	347	0	841
	8:15 AM	26	0	24	146	0	9	0	317	0	13	396	0	931
	8:30 AM	32	0	23	158	0	8	0	275	0	11	388	0	895
	8:45 AM	30	0	31	146	0	6	0	280	0	7	438	0	938
	VOLUMES	160	0	153	994	0	41	0	2,190	0	64	3,087	0	6,689
	APPROACH %	51%	0%	49%	96%	0%	4%	0%	100%	0%	2%	98%	0%	
	APP/DEPART	313	/	0	1,035	/	64	2,190	/	3,337	3,151	/	3,288	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	109	0	86	597	0	27	0	1,148	0	43	1,607	0	3,617
	APPROACH %	56%	0%	44%	96%	0%	4%	0%	100%	0%	3%	97%	0%	
	PEAK HR FACTOR		0.871			0.940			0.905			0.849		0.952
	APP/DEPART	195	/	0	624	/	43	1,148	/	1,831	1,650	/	1,743	0
PM	4:00 PM	8	0	11	183	0	1	0	279	0	6	315	0	803
	4:15 PM	10	0	16	172	0	2	0	253	0	7	298	0	758
	4:30 PM	21	0	17	222	0	6	0	229	0	7	337	0	839
	4:45 PM	11	0	7	193	0	5	0	289	0	11	295	0	811
	5:00 PM	8	0	13	206	0	3	0	270	0	5	291	0	796
	5:15 PM	9	0	17	235	0	4	0	294	0	9	301	0	869
	5:30 PM	8	0	12	224	0	6	0	323	0	7	351	0	931
	5:45 PM	9	0	18	237	0	5	0	315	0	12	337	0	933
	VOLUMES	84	0	111	1,672	0	32	0	2,252	0	64	2,525	0	6,740
	APPROACH %	43%	0%	57%	98%	0%	2%	0%	100%	0%	2%	98%	0%	
	APP/DEPART	195	/	0	1,704	/	64	2,252	/	4,035	2,589	/	2,641	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	34	0	60	902	0	18	0	1,202	0	33	1,280	0	3,529
	APPROACH %	36%	0%	64%	98%	0%	2%	0%	100%	0%	3%	97%	0%	
	PEAK HR FACTOR		0.870			0.950			0.930			0.917		0.946
	APP/DEPART	94	/	0	920	/	33	1,202	/	2,164	1,313	/	1,332	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Thu, Sep 24, 15

LOCATION: Culver City
NORTH & SOUTH: Main
EAST & WEST: Culver

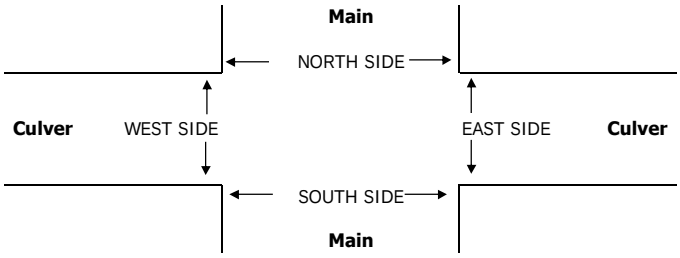
PROJECT #: SC0715
LOCATION #: 1
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

		NORTHBOUND Main			SOUTHBOUND Main			EASTBOUND Culver			WESTBOUND Culver			
	LANES:	NL X	NT X	NR X	SL 1	ST X	SR 1	EL 1	ET 3	ER X	WL X	WT 3	WR 0	TOTAL
AM	7:00 AM	0	0	0	15	0	14	42	295	0	0	280	11	657
	7:15 AM	0	0	0	16	0	26	46	300	0	0	299	17	704
	7:30 AM	0	0	0	20	0	51	66	322	0	0	322	22	803
	7:45 AM	0	0	0	19	0	39	66	409	0	0	375	43	951
	8:00 AM	0	0	0	21	0	66	58	395	0	0	312	31	883
	8:15 AM	0	0	0	25	0	53	65	407	0	0	336	32	918
	8:30 AM	0	0	0	23	0	52	67	392	0	0	357	19	910
	8:45 AM	0	0	0	18	0	62	72	430	0	0	309	18	909
	VOLUMES	0	0	0	157	0	363	482	2,950	0	0	2,590	193	6,735
	APPROACH %	0%	0%	0%	30%	0%	70%	14%	86%	0%	0%	93%	7%	
	APP/DEPART	0	/	667	520	/	0	3,432	/	3,107	2,783	/	2,961	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	0	0	0	88	0	210	256	1,603	0	0	1,380	125	3,662
	APPROACH %	0%	0%	0%	30%	0%	70%	14%	86%	0%	0%	92%	8%	
	PEAK HR FACTOR		0.000			0.856			0.978			0.900		0.963
	APP/DEPART	0	/	379	298	/	0	1,859	/	1,691	1,505	/	1,592	0
PM	4:00 PM	0	0	0	47	0	57	39	419	0	0	246	10	818
	4:15 PM	0	0	0	62	0	40	46	443	0	0	263	14	868
	4:30 PM	0	0	0	65	0	44	35	394	0	0	274	13	825
	4:45 PM	0	0	0	69	0	56	41	454	0	1	255	16	892
	5:00 PM	0	0	0	58	0	44	40	429	0	0	271	27	869
	5:15 PM	0	0	0	49	0	51	29	465	0	0	276	23	893
	5:30 PM	0	0	0	51	0	56	30	429	0	0	278	25	869
	5:45 PM	0	0	0	52	0	59	39	414	0	0	263	21	848
	VOLUMES	0	0	0	453	0	407	299	3,447	0	1	2,126	149	6,882
	APPROACH %	0%	0%	0%	53%	0%	47%	8%	92%	0%	0%	93%	7%	
	APP/DEPART	0	/	435	860	/	0	3,746	/	3,901	2,276	/	2,546	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	0	0	0	227	0	207	140	1,777	0	1	1,080	91	3,523
	APPROACH %	0%	0%	0%	52%	0%	48%	7%	93%	0%	0%	92%	8%	
	PEAK HR FACTOR		0.000			0.868			0.968			0.967		0.986
	APP/DEPART	0	/	225	434	/	0	1,917	/	2,005	1,172	/	1,293	0



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	2	2	0	5	9	1	0	0	4	5	1	2	0	1	4
	7:15 AM	5	0	5	3	13	4	0	4	3	11	1	0	1	0	2
	7:30 AM	10	0	4	3	17	5	0	3	3	11	5	0	1	0	6
	7:45 AM	10	0	3	10	23	10	0	3	10	23	0	0	0	0	0
	8:00 AM	4	0	5	2	11	3	0	5	2	10	1	0	0	0	1
	8:15 AM	12	0	13	12	37	9	0	13	8	30	3	0	0	4	7
	8:30 AM	17	0	11	13	41	14	0	10	12	36	3	0	1	1	5
	8:45 AM	7	2	7	5	21	5	0	5	5	15	2	2	2	0	6
	TOTAL	67	4	48	53	172	51	0	43	47	141	16	4	5	6	31
PM	4:00 PM	16	0	7	19	42	14	0	6	18	38	2	0	1	1	4
	4:15 PM	31	1	14	16	62	28	0	14	14	56	3	1	0	2	6
	4:30 PM	30	0	9	20	59	30	0	9	17	56	0	0	0	3	3
	4:45 PM	30	2	5	15	52	28	0	4	14	46	2	2	1	1	6
	5:00 PM	15	1	8	20	44	13	0	7	19	39	2	1	1	1	5
	5:15 PM	45	1	8	15	69	44	0	7	13	64	1	1	1	2	5
	5:30 PM	35	0	18	25	78	33	0	17	24	74	2	0	1	1	4
	5:45 PM	34	2	12	36	84	33	0	11	33	77	1	2	1	3	7
	TOTAL	236	7	81	166	490	223	0	75	152	450	13	7	6	14	40

Turning Movement Count Report AM

Location ID: 2
North/South: Canfield/Ince Blvd
East/West: Culver Blvd

Date: 02/18/15
City: Culver City, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	1	0	0	1	55	4	9	3	239	127	125	0	564
7:15	1	0	0	1	48	4	6	1	276	160	136	3	636
7:30	2	0	0	0	68	5	9	2	296	225	157	3	767
7:45	0	0	0	2	62	7	13	2	356	224	159	2	827
8:00	2	0	0	0	56	6	10	6	296	264	180	1	821
8:15	4	0	0	0	58	6	15	1	309	255	166	1	815
8:30	1	0	0	0	64	9	11	4	308	257	175	3	832
8:45	1	0	0	1	92	9	16	6	289	260	177	2	853
9:00	2	0	0	0	74	12	20	4	275	251	169	2	809
9:15	2	0	0	1	73	15	19	2	262	200	173	2	749
9:30	0	0	0	2	72	15	15	1	240	180	167	2	694
9:45	5	0	0	3	72	16	12	1	241	185	147	1	683
Total Volume:	21	0	0	11	794	108	155	33	3387	2588	1931	22	9050
Approach %	100%	0%	0%	1%	87%	12%	4%	1%	95%	57%	43%	0%	
Peak Hr Begin:	8:00												
PHV	8	0	0	1	270	30	52	17	1202	1036	698	7	3321
PHF	0.500			0.738			0.978			0.978			0.973

City Count, LLC.
www.citycount.com

Turning Movement Count Report PM

Location ID: 2
North/South: Canfield/Ince Blvd
East/West: Culver Blvd

Date: 02/18/15
City: Culver City, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	8	0	0	4	50	9	22	5	216	244	158	6	722
15:15	4	0	0	4	60	7	18	2	194	298	170	2	759
15:30	5	0	0	6	78	10	18	7	180	273	152	3	732
15:45	3	0	0	7	80	10	21	9	205	261	160	6	762
16:00	5	0	0	4	91	12	13	1	197	296	175	10	804
16:15	4	0	0	1	68	8	21	2	206	332	175	5	822
16:30	5	0	0	1	89	5	23	6	193	310	154	5	791
16:45	5	0	0	8	97	12	15	5	213	300	162	9	826
17:00	7	0	0	3	60	8	25	3	218	314	182	6	826
17:15	3	0	0	3	89	6	27	5	230	300	209	5	877
17:30	9	0	0	7	102	12	24	1	202	298	220	6	881
17:45	6	0	0	6	90	9	22	5	242	295	185	6	866
Total Volume:	64	0	0	54	954	108	249	51	2496	3521	2102	69	9668
Approach %	100%	0%	0%	5%	85%	10%	9%	2%	89%	62%	37%	1%	
Peak Hr Begin:	17:00												
PHV	25	0	0	19	341	35	98	14	892	1207	796	23	3450
PHF	0.694			0.816			0.933			0.967			0.979

City Count, LLC.
www.citycount.com

Turning Movement Count Report AM

Location ID: 3
North/South: Ince Blvd
East/West: Washington Blvd

Date: 02/18/15
City: Culver City, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	2	14	115	219	0	9	23	12	0	0	0	0	394
7:15	0	5	143	269	0	9	19	14	0	0	0	0	459
7:30	1	12	198	266	0	8	20	28	0	1	0	0	534
7:45	0	18	204	338	0	8	21	34	0	0	0	0	623
8:00	1	26	224	252	0	16	33	44	0	0	1	0	597
8:15	2	19	233	288	1	14	33	48	0	0	1	0	639
8:30	2	24	249	307	0	18	23	34	0	1	1	0	659
8:45	1	32	226	282	0	13	27	36	0	1	0	0	618
9:00	1	28	232	255	0	10	29	30	0	0	1	0	586
9:15	0	32	186	251	0	21	21	16	0	0	0	0	527
9:30	2	34	163	222	0	21	20	32	0	0	3	0	497
9:45	1	34	149	239	0	18	21	14	0	1	0	0	477
Total Volume:	13	278	2322	3188	1	165	290	342	0	4	7	0	6610
Approach %	0%	11%	89%	95%	0%	5%	46%	54%	0%	36%	64%	0%	
Peak Hr Begin:	7:45												
PHV	5	87	910	1185	1	56	110	160	0	1	3	0	2518
PHF	0.911			0.897			0.833			0.500			0.955

City Count, LLC.
www.citycount.com

Turning Movement Count Report PM

Location ID: 3
North/South: Ince Blvd
East/West: Washington Blvd

Date: 02/18/15
City: Culver City, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	1	17	225	210	0	20	25	24	0	0	1	0	523
15:15	1	25	259	199	0	16	20	14	0	0	2	0	536
15:30	2	19	281	180	0	16	19	23	0	2	0	0	542
15:45	2	17	253	216	0	14	22	20	0	1	2	0	547
16:00	4	19	280	193	0	24	18	22	0	2	5	0	567
16:15	0	26	337	210	0	27	14	18	0	0	3	0	635
16:30	1	15	299	204	0	25	20	20	0	0	3	0	587
16:45	0	26	316	195	0	28	19	26	0	1	3	0	614
17:00	4	18	274	221	0	13	24	22	0	0	1	0	577
17:15	1	19	282	208	0	25	34	36	0	1	0	0	606
17:30	5	13	290	225	0	26	28	17	0	3	2	0	609
17:45	5	15	261	239	0	32	32	24	0	3	0	0	611
Total Volume:	26	229	3357	2500	0	266	275	266	0	13	22	0	6954
Approach %	1%	6%	93%	90%	0%	10%	51%	49%	0%	37%	63%	0%	
Peak Hr Begin:	16:15												
PHV	5	85	1226	830	0	93	77	86	0	1	10	0	2413
PHF	0.906			0.974			0.886			0.688			0.950

City Count, LLC.
www.citycount.com

INTERSECTION TURNING MOVEMENT COUNTS

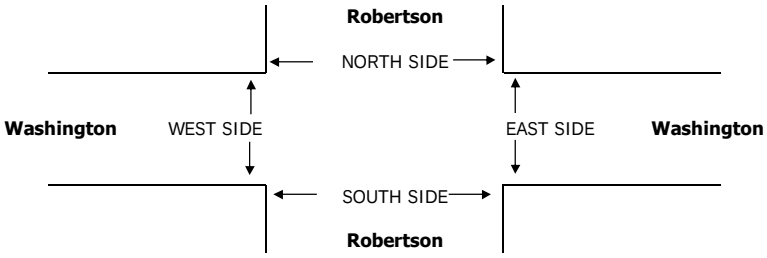
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:	LOCATION:	Culver City	PROJECT #:	SC0715
Thu, Sep 24, 15	NORTH & SOUTH:	Robertson	LOCATION #:	2
	EAST & WEST:	Washington	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND Robertson			SOUTHBOUND Robertson			EASTBOUND Washington			WESTBOUND Washington			
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL
AM	7:00 AM	12	48	18	11	29	6	10	95	11	11	205	21	477
	7:15 AM	13	105	21	13	28	10	14	106	3	7	228	36	584
	7:30 AM	17	86	17	23	43	12	9	119	14	3	260	18	621
	7:45 AM	13	108	22	31	55	15	6	161	18	9	281	17	736
	8:00 AM	24	78	42	39	49	20	11	185	12	15	254	32	761
	8:15 AM	15	78	36	23	51	21	12	155	13	22	279	36	741
	8:30 AM	18	85	14	21	63	21	7	148	18	16	259	37	707
	8:45 AM	28	109	31	17	73	23	12	148	21	24	239	36	761
	VOLUMES	140	697	201	178	391	128	81	1,117	110	107	2,005	233	5,388
	APPROACH %	13%	67%	19%	26%	56%	18%	6%	85%	8%	5%	86%	10%	
	APP/DEPART	1,038	/	1,011	697	/	608	1,308	/	1,496	2,345	/	2,273	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	85	350	123	100	236	85	42	636	64	77	1,031	141	2,970
	APPROACH %	15%	63%	22%	24%	56%	20%	6%	86%	9%	6%	83%	11%	
	PEAK HR FACTOR		0.830			0.931			0.892			0.927		0.976
	APP/DEPART	558	/	533	421	/	377	742	/	859	1,249	/	1,201	0
PM	4:00 PM	8	44	10	31	42	12	36	208	27	19	105	36	578
	4:15 PM	8	54	21	30	44	10	30	212	20	23	124	39	615
	4:30 PM	8	46	17	22	60	17	33	247	33	12	136	44	675
	4:45 PM	5	38	16	30	47	17	33	266	19	22	143	41	677
	5:00 PM	9	48	22	38	64	25	54	270	12	22	184	53	801
	5:15 PM	10	47	20	30	47	14	57	274	15	26	177	48	765
	5:30 PM	10	75	20	27	65	19	47	214	27	18	157	43	722
	5:45 PM	7	62	25	28	57	13	33	260	18	15	127	56	701
	VOLUMES	65	414	151	236	426	127	323	1,951	171	157	1,153	360	5,534
	APPROACH %	10%	66%	24%	30%	54%	16%	13%	80%	7%	9%	69%	22%	
	APP/DEPART	630	/	1,097	789	/	754	2,445	/	2,338	1,670	/	1,345	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	36	232	87	123	233	71	191	1,018	72	81	645	200	2,989
	APPROACH %	10%	65%	25%	29%	55%	17%	15%	79%	6%	9%	70%	22%	
	PEAK HR FACTOR		0.845			0.841			0.926			0.894		0.933
	APP/DEPART	355	/	623	427	/	386	1,281	/	1,228	926	/	752	0



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	5	1	5	5	16	5	0	5	4	14	0	1	0	1	2
	7:15 AM	4	1	1	1	7	4	1	1	1	7	0	0	0	0	0
	7:30 AM	16	2	1	2	21	7	2	1	2	12	9	0	0	0	9
	7:45 AM	5	1	3	3	12	5	0	2	3	10	0	1	1	0	2
	8:00 AM	8	5	2	4	19	5	3	1	4	13	3	2	1	0	6
	8:15 AM	10	3	2	5	20	9	2	2	4	17	1	1	0	1	3
	8:30 AM	7	5	5	4	21	5	4	2	3	14	2	1	3	1	7
	8:45 AM	8	10	3	15	36	6	7	3	11	27	2	3	0	4	9
	TOTAL	63	28	22	39	152	46	19	17	32	114	17	9	5	7	38
PM	4:00 PM	3	7	3	6	19	3	5	3	5	16	0	2	0	1	3
	4:15 PM	4	2	1	4	11	3	1	1	4	9	1	1	0	0	2
	4:30 PM	4	3	1	3	11	4	2	0	3	9	0	1	1	0	2
	4:45 PM	6	8	4	5	23	4	7	2	4	17	2	1	2	1	6
	5:00 PM	11	5	3	7	26	10	4	2	4	20	1	1	1	3	6
	5:15 PM	6	5	12	5	28	5	5	11	4	25	1	0	1	1	3
	5:30 PM	7	10	2	6	25	4	8	2	3	17	3	2	0	3	8
	5:45 PM	9	13	6	4	32	8	12	5	3	28	1	1	1	1	4
	TOTAL	50	53	32	40	175	41	44	26	30	141	9	9	6	10	34

INTERSECTION TURNING MOVEMENT COUNTS

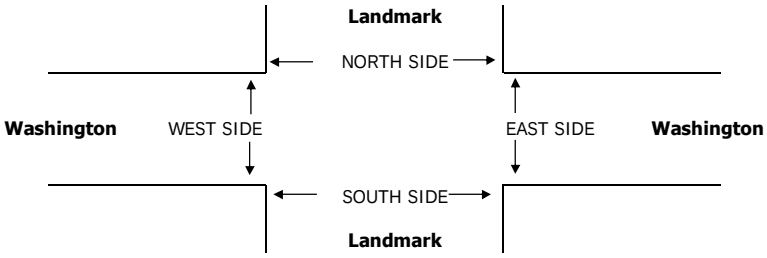
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:					
Thu, Sep 24, 15	LOCATION:	Culver City	PROJECT #:	SC0715	
	NORTH & SOUTH:	Landmark	LOCATION #:	3	
	EAST & WEST:	Washington	CONTROL:	SIGNAL	

NOTES:

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

		NORTHBOUND Landmark			SOUTHBOUND Landmark			EASTBOUND Washington			WESTBOUND Washington			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	1	X	1	X	X	X	X	2	0	1	2	X	
AM	7:00 AM	5	0	4	0	0	0	0	116	12	9	260	0	406
	7:15 AM	0	0	4	0	0	0	0	100	9	3	229	0	345
	7:30 AM	7	0	6	0	0	0	0	146	26	13	295	0	493
	7:45 AM	13	0	9	0	0	0	0	178	30	16	324	0	570
	8:00 AM	11	0	14	0	0	0	0	234	28	13	256	0	556
	8:15 AM	19	0	15	0	0	0	0	199	21	23	307	0	584
	8:30 AM	10	0	9	0	0	0	0	185	13	10	312	0	539
	8:45 AM	3	0	3	0	0	0	0	165	8	10	274	0	463
	VOLUMES	68	0	64	0	0	0	0	1,323	147	97	2,257	0	3,956
	APPROACH %	52%	0%	48%	0%	0%	0%	0%	90%	10%	4%	96%	0%	
	APP/DEPART	132	/	0	0	/	243	1,470	/	1,388	2,354	/	2,325	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	53	0	47	0	0	0	0	796	92	62	1,199	0	2,249
	APPROACH %	53%	0%	47%	0%	0%	0%	0%	90%	10%	5%	95%	0%	
	PEAK HR FACTOR		0.735			0.000			0.847			0.927		0.963
	APP/DEPART	100	/	0	0	/	154	888	/	843	1,261	/	1,252	0
PM	4:00 PM	19	0	19	0	0	0	0	235	8	11	136	0	428
	4:15 PM	9	0	18	0	0	0	0	251	3	7	146	0	434
	4:30 PM	18	0	16	0	0	0	0	269	7	4	162	0	476
	4:45 PM	16	0	11	0	0	0	0	308	5	2	181	0	523
	5:00 PM	11	0	11	0	0	0	0	327	2	3	251	0	605
	5:15 PM	6	0	4	0	0	0	0	328	2	2	242	0	584
	5:30 PM	1	0	11	0	0	0	0	267	1	0	229	0	509
	5:45 PM	5	0	7	0	0	0	0	316	1	1	204	0	534
	VOLUMES	85	0	97	0	0	0	0	2,301	29	30	1,551	0	4,093
	APPROACH %	47%	0%	53%	0%	0%	0%	0%	99%	1%	2%	98%	0%	
	APP/DEPART	182	/	0	0	/	54	2,330	/	2,403	1,581	/	1,636	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	23	0	33	0	0	0	0	1,238	6	6	926	0	2,232
	APPROACH %	41%	0%	59%	0%	0%	0%	0%	100%	0%	1%	99%	0%	
	PEAK HR FACTOR		0.636			0.000			0.942			0.917		0.922
	APP/DEPART	56	/	0	0	/	8	1,244	/	1,275	932	/	949	0



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	1	9	1	11	0	0	9	1	10	0	1	0	0	1
	7:15 AM	0	1	3	0	4	0	0	3	0	3	0	1	0	0	1
	7:30 AM	3	1	0	0	4	0	1	0	0	1	3	0	0	0	3
	7:45 AM	1	1	2	2	6	0	0	2	2	4	1	1	0	0	2
	8:00 AM	0	7	3	0	10	0	5	3	0	8	0	2	0	0	2
	8:15 AM	0	1	2	0	3	0	0	2	0	2	0	1	0	0	1
	8:30 AM	1	1	1	0	3	0	1	1	0	2	1	0	0	0	1
	8:45 AM	1	4	4	1	10	0	1	4	1	6	1	3	0	0	4
	TOTAL	6	17	24	4	51	0	8	24	4	36	6	9	0	0	15
PM	4:00 PM	0	3	4	3	10	0	1	4	3	8	0	2	0	0	2
	4:15 PM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	4:30 PM	0	1	3	0	4	0	0	2	0	2	0	1	1	0	2
	4:45 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2
	5:00 PM	1	1	5	0	7	0	0	5	0	5	1	1	0	0	2
	5:15 PM	2	4	3	0	9	0	0	3	0	3	2	4	0	0	6
	5:30 PM	0	3	0	0	3	0	1	0	0	1	0	2	0	0	2
	5:45 PM	1	2	2	0	5	0	0	2	0	2	1	2	0	0	3
	TOTAL	4	16	18	3	41	0	2	17	3	22	4	14	1	0	19

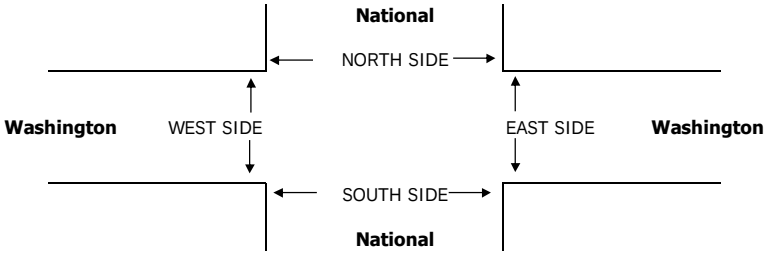
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:	LOCATION:	Culver City	PROJECT #:	SC0715
Thu, Sep 24, 15	NORTH & SOUTH:	National	LOCATION #:	4
	EAST & WEST:	Washington	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND National			SOUTHBOUND National			EASTBOUND Washington			WESTBOUND Washington			
	LANES:	NL 2	NT 2	NR 0	SL 2	ST 2	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2.5	WR 0.5	TOTAL
AM	7:00 AM	56	212	7	11	85	10	10	78	18	12	180	38	717
	7:15 AM	46	238	6	12	86	13	9	100	19	9	228	66	832
	7:30 AM	47	181	7	18	119	13	16	133	21	39	311	50	955
	7:45 AM	55	224	8	20	181	22	14	167	26	50	353	49	1,169
	8:00 AM	45	132	11	18	191	20	7	138	51	35	266	44	958
	8:15 AM	62	189	10	25	186	26	23	148	41	36	271	36	1,053
	8:30 AM	25	147	6	22	199	17	12	130	38	23	234	42	895
	8:45 AM	31	166	6	16	192	14	9	140	39	25	353	56	1,047
	VOLUMES	367	1,489	61	142	1,239	135	100	1,034	253	229	2,196	381	7,626
	APPROACH %	19%	78%	3%	9%	82%	9%	7%	75%	18%	8%	78%	14%	
	APP/DEPART	1,917	/	1,970	1,516	/	1,721	1,387	/	1,236	2,806	/	2,699	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	209	726	36	81	677	81	60	586	139	160	1,201	179	4,135
	APPROACH %	22%	75%	4%	10%	81%	10%	8%	75%	18%	10%	78%	12%	
	PEAK HR FACTOR		0.846			0.885			0.926			0.852		0.884
	APP/DEPART	971	/	965	839	/	976	785	/	702	1,540	/	1,492	0
PM	4:00 PM	36	132	19	64	156	12	13	185	59	17	148	18	859
	4:15 PM	33	154	27	48	217	14	6	183	59	16	140	20	917
	4:30 PM	40	147	20	47	192	6	12	225	42	20	133	20	904
	4:45 PM	41	149	23	68	228	10	13	257	48	26	141	31	1,035
	5:00 PM	51	170	19	54	225	13	24	275	60	35	217	31	1,174
	5:15 PM	39	164	18	52	259	6	20	277	45	30	199	29	1,138
	5:30 PM	65	199	18	56	234	17	17	216	51	38	193	24	1,128
	5:45 PM	52	200	24	76	210	15	23	261	42	22	166	19	1,110
	VOLUMES	357	1,315	168	465	1,721	93	128	1,879	406	204	1,337	192	8,265
	APPROACH %	19%	71%	9%	20%	76%	4%	5%	78%	17%	12%	77%	11%	
	APP/DEPART	1,840	/	1,635	2,279	/	2,330	2,413	/	2,513	1,733	/	1,787	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	207	733	79	238	928	51	84	1,029	198	125	775	103	4,550
	APPROACH %	20%	72%	8%	20%	76%	4%	6%	78%	15%	12%	77%	10%	
	PEAK HR FACTOR		0.903			0.960			0.913			0.886		0.969
	APP/DEPART	1,019	/	920	1,217	/	1,251	1,311	/	1,346	1,003	/	1,033	0



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	2	0	2	8	12	2	0	0	6	8	0	0	2	2	4
	7:15 AM	0	4	0	10	14	0	1	0	2	3	0	3	0	8	11
	7:30 AM	3	2	0	9	14	2	2	0	8	12	1	0	0	1	2
	7:45 AM	6	5	0	11	22	6	2	0	7	15	0	3	0	4	7
	8:00 AM	0	2	2	13	17	0	2	2	13	17	0	0	0	0	0
	8:15 AM	2	0	0	5	7	1	0	0	3	4	1	0	0	2	3
	8:30 AM	0	1	1	5	7	0	0	1	4	5	0	1	0	1	2
	8:45 AM	10	0	0	6	16	10	0	0	4	14	0	0	0	2	2
	TOTAL	23	14	5	67	109	21	7	3	47	78	2	7	2	20	31
PM	4:00 PM	1	4	0	26	31	1	4	0	26	31	0	0	0	0	0
	4:15 PM	3	2	0	9	14	2	1	0	7	10	1	1	0	2	4
	4:30 PM	1	0	0	9	10	1	0	0	6	7	0	0	0	3	3
	4:45 PM	5	0	0	7	12	5	0	0	7	12	0	0	0	0	0
	5:00 PM	3	1	0	13	17	1	0	0	11	12	2	1	0	2	5
	5:15 PM	5	2	1	17	25	2	0	1	12	15	3	2	0	5	10
	5:30 PM	5	0	0	8	13	5	0	0	6	11	0	0	0	2	2
	5:45 PM	1	0	1	13	15	1	0	1	11	13	0	0	0	2	2
	TOTAL	24	9	2	102	137	18	5	2	86	111	6	4	0	16	26

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Thu, Sep 24, 15

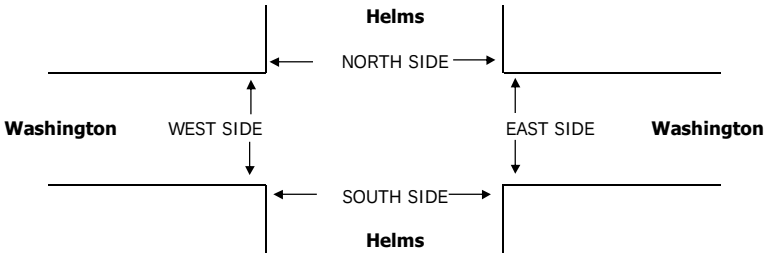
LOCATION: Culver City
NORTH & SOUTH: Helms
EAST & WEST: Washington

PROJECT #: SC0715
LOCATION #: 5
CONTROL: SIGNAL

NOTES:

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

		NORTHBOUND Helms			SOUTHBOUND Helms			EASTBOUND Washington			WESTBOUND Washington			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	5	0	1	0	0	0	0	116	0	3	290	0	415
	7:15 AM	14	0	2	0	0	0	0	117	1	0	313	0	447
	7:30 AM	11	0	1	0	0	0	0	124	1	1	353	0	491
	7:45 AM	28	0	1	0	0	0	0	163	8	3	373	0	576
	8:00 AM	23	0	3	0	0	0	0	181	6	4	327	0	544
	8:15 AM	31	0	4	0	0	0	0	196	4	2	346	0	583
	8:30 AM	17	0	6	0	0	0	0	176	5	2	344	0	550
	8:45 AM	17	0	4	0	0	0	0	154	4	2	333	0	514
	VOLUMES	146	0	22	0	0	0	0	1,227	29	17	2,679	0	4,120
	APPROACH %	87%	0%	13%	0%	0%	0%	0%	98%	2%	1%	99%	0%	
	APP/DEPART	168	/	0	0	/	46	1,256	/	1,249	2,696	/	2,825	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	99	0	14	0	0	0	0	716	23	11	1,390	0	2,253
	APPROACH %	88%	0%	12%	0%	0%	0%	0%	97%	3%	1%	99%	0%	
	PEAK HR FACTOR		0.807			0.000			0.924			0.932		0.966
	APP/DEPART	113	/	0	0	/	34	739	/	730	1,401	/	1,489	0
PM	4:00 PM	13	0	3	0	0	0	0	267	5	2	184	0	474
	4:15 PM	13	0	2	0	0	0	0	273	8	5	210	0	511
	4:30 PM	9	0	7	0	0	0	0	323	10	3	188	0	540
	4:45 PM	15	0	1	0	0	0	0	357	15	5	208	0	601
	5:00 PM	19	0	0	0	0	0	0	282	20	4	250	0	575
	5:15 PM	17	0	2	0	0	0	0	307	21	5	243	0	595
	5:30 PM	18	0	2	0	0	0	0	310	14	8	189	0	541
	5:45 PM	10	0	3	0	0	0	1	327	8	2	194	0	545
	VOLUMES	114	0	20	0	0	0	1	2,446	101	34	1,666	0	4,382
	APPROACH %	85%	0%	15%	0%	0%	0%	0%	96%	4%	2%	98%	0%	
	APP/DEPART	134	/	0	0	/	132	2,548	/	2,469	1,700	/	1,781	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	69	0	5	0	0	0	0	1,256	70	22	890	0	2,312
	APPROACH %	93%	0%	7%	0%	0%	0%	0%	95%	5%	2%	98%	0%	
	PEAK HR FACTOR		0.925			0.000			0.891			0.898		0.962
	APP/DEPART	74	/	0	0	/	90	1,326	/	1,263	912	/	959	0



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	1	0	1	2	0	1	0	1	2	0	0	0	0	0
	7:15 AM	0	3	3	3	9	0	3	3	3	9	0	0	0	0	0
	7:30 AM	2	4	1	1	8	0	4	1	1	6	2	0	0	0	2
	7:45 AM	1	4	2	1	8	0	3	2	1	6	1	1	0	0	2
	8:00 AM	2	1	5	3	11	0	1	5	3	9	2	0	0	0	2
	8:15 AM	1	1	3	5	10	0	1	3	5	9	1	0	0	0	1
	8:30 AM	1	3	9	5	18	0	3	7	5	15	1	0	2	0	3
	8:45 AM	0	1	3	2	6	0	0	3	2	5	0	1	0	0	1
	TOTAL	7	18	26	21	72	0	16	24	21	61	7	2	2	0	11
PM	4:00 PM	2	3	9	3	17	0	2	8	3	13	2	1	1	0	4
	4:15 PM	1	3	5	1	10	0	2	5	1	8	1	1	0	0	2
	4:30 PM	1	0	3	4	8	0	0	2	3	5	1	0	1	1	3
	4:45 PM	0	1	8	3	12	0	0	8	2	10	0	1	0	1	2
	5:00 PM	1	0	1	8	10	0	0	1	8	9	1	0	0	0	1
	5:15 PM	1	4	6	2	13	0	0	6	2	8	1	4	0	0	5
	5:30 PM	0	4	6	6	16	0	3	5	6	14	0	1	1	0	2
	5:45 PM	1	1	1	1	4	0	0	1	1	2	1	1	0	0	2
	TOTAL	7	16	39	28	90	0	7	36	26	69	7	9	3	2	21

INTERSECTION TURNING MOVEMENT COUNTS

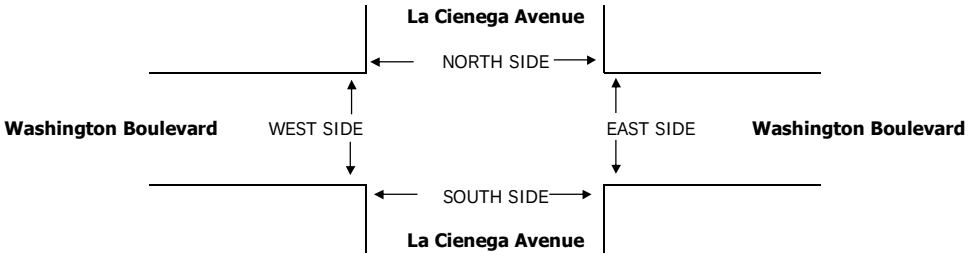
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:	LOCATION:	Culver City	PROJECT #:	SC0715
Thu, Sep 24, 15	NORTH & SOUTH:	La Cienega Avenue	LOCATION #:	6
	EAST & WEST:	Washington Boulevard	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND La Cienega Avenue			SOUTHBOUND La Cienega Avenue			EASTBOUND Washington Boulevard			WESTBOUND Washington Boulevard			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	1	0	0	1	0	0	2	0	0	2	0	
AM	7:00 AM	1	0	4	5	0	17	5	111	2	3	284	2	434
	7:15 AM	1	0	1	2	0	13	1	131	2	3	332	2	488
	7:30 AM	3	0	2	6	0	32	2	131	2	3	355	2	538
	7:45 AM	10	0	3	18	0	34	5	158	6	3	324	6	567
	8:00 AM	18	0	5	35	0	28	3	201	1	4	313	12	620
	8:15 AM	35	0	11	14	0	39	5	173	1	4	346	8	636
	8:30 AM	12	0	3	7	0	33	2	150	5	1	315	1	529
	8:45 AM	4	0	1	9	0	32	5	150	3	1	339	7	551
	VOLUMES	84	0	30	96	0	228	28	1,205	22	22	2,608	40	4,363
	APPROACH %	74%	0%	26%	30%	0%	70%	2%	96%	2%	1%	98%	1%	
	APP/DEPART	114	/	67	324	/	43	1,255	/	1,332	2,670	/	2,921	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	66	0	21	73	0	133	15	663	10	14	1,338	28	2,361
	APPROACH %	76%	0%	24%	35%	0%	65%	2%	96%	1%	1%	97%	2%	
	PEAK HR FACTOR		0.473			0.817			0.839			0.958		0.928
	APP/DEPART	87	/	42	206	/	24	688	/	757	1,380	/	1,538	0
PM	4:00 PM	10	0	3	16	0	13	6	291	15	1	168	2	525
	4:15 PM	17	0	3	12	0	22	4	257	11	1	148	4	479
	4:30 PM	8	0	9	23	0	18	5	339	10	6	154	7	579
	4:45 PM	26	0	2	16	0	26	2	289	9	0	185	12	567
	5:00 PM	37	0	5	30	0	29	6	276	0	2	200	5	590
	5:15 PM	5	0	5	23	0	18	8	283	1	2	165	7	517
	5:30 PM	5	0	2	13	0	16	4	303	7	3	149	1	503
	5:45 PM	5	0	5	24	0	24	5	310	3	2	155	6	539
	VOLUMES	113	0	34	157	0	166	40	2,348	56	17	1,324	44	4,299
	APPROACH %	77%	0%	23%	49%	0%	51%	2%	96%	2%	1%	96%	3%	
	APP/DEPART	147	/	83	323	/	72	2,444	/	2,540	1,385	/	1,604	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	76	0	21	92	0	91	21	1,187	20	10	704	31	2,253
	APPROACH %	78%	0%	22%	50%	0%	50%	2%	97%	2%	1%	94%	4%	
	PEAK HR FACTOR		0.577			0.775			0.867			0.900		0.955
	APP/DEPART	97	/	51	183	/	29	1,228	/	1,301	745	/	872	0



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	2	0	2	0	0	1	0	1	0	0	1	0	1
	7:15 AM	3	1	2	1	7	1	0	2	0	3	2	1	0	1	4
	7:30 AM	3	0	0	0	3	1	0	0	0	1	2	0	0	0	2
	7:45 AM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	5	1	1	0	7	3	1	1	0	5	2	0	0	0	2
	8:30 AM	4	1	3	0	8	4	0	2	0	6	0	1	1	0	2
	8:45 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	TOTAL	16	4	9	1	30	10	1	7	0	18	6	3	2	1	12
PM	4:00 PM	1	2	7	0	10	1	2	6	0	9	0	0	1	0	1
	4:15 PM	7	1	8	0	16	4	0	8	0	12	3	1	0	0	4
	4:30 PM	4	0	7	0	11	4	0	6	0	10	0	0	1	0	1
	4:45 PM	3	1	6	0	10	2	0	6	0	8	1	1	0	0	2
	5:00 PM	4	0	3	0	7	3	0	3	0	6	1	0	0	0	1
	5:15 PM	4	1	3	0	8	3	0	2	0	5	1	1	1	0	3
	5:30 PM	4	0	5	0	9	3	0	5	0	8	1	0	0	0	1
	5:45 PM	6	5	12	1	24	4	0	9	0	13	2	5	3	1	11
	TOTAL	33	10	51	1	95	24	2	45	0	71	9	8	6	1	24

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-004

Day: Wednesday

City: Culver City

Date: 11/9/2016

AM

NS/EW Streets:	La Cienega Blvd			La Cienega Blvd			Washington Blvd			Washington Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	1	1	2	1	
7:00 AM	36	388	2	23	206	4	5	98	7	15	334	91	1209
7:15 AM	91	385	2	13	253	7	12	122	7	8	340	83	1323
7:30 AM	99	416	3	26	229	12	10	146	24	18	332	83	1398
7:45 AM	95	381	2	21	212	10	13	172	19	11	306	65	1307
8:00 AM	73	412	7	39	283	9	15	184	28	14	331	80	1475
8:15 AM	71	357	9	39	273	17	17	214	33	25	332	92	1479
8:30 AM	75	392	7	28	233	10	14	202	35	13	331	75	1415
8:45 AM	91	353	6	27	253	13	11	160	26	17	320	73	1350
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	631	3084	38	216	1942	82	97	1298	179	121	2626	642	10956
APPROACH %'s :	16.81%	82.17%	1.01%	9.64%	86.70%	3.66%	6.16%	82.47%	11.37%	3.57%	77.49%	18.94%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	310	1514	29	133	1042	49	57	760	122	69	1314	320	5719
PEAK HR FACTOR :		0.942			0.924			0.889			0.948		0.967

CONTROL : Sginalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-004

Day: Wednesday

City: Culver City

Date: 11/9/2016

PM

NS/EW Streets:	La Cienega Blvd			La Cienega Blvd			Washington Blvd			Washington Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	1	1	2	1	
4:00 PM	26	205	12	66	308	9	15	299	29	18	128	26	1141
4:15 PM	20	177	11	63	284	3	12	301	39	22	106	33	1071
4:30 PM	14	230	23	82	308	7	16	304	28	23	118	30	1183
4:45 PM	22	226	18	74	328	4	17	292	31	12	125	35	1184
5:00 PM	25	221	16	73	321	5	24	310	33	19	127	33	1207
5:15 PM	10	221	15	81	348	3	10	293	25	19	151	44	1220
5:30 PM	20	228	12	74	287	5	10	317	30	19	153	30	1185
5:45 PM	10	202	16	63	321	9	11	321	22	18	122	33	1148
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	147	1710	123	576	2505	45	115	2437	237	150	1030	264	9339
APPROACH %'s :	7.42%	86.36%	6.21%	18.43%	80.13%	1.44%	4.12%	87.38%	8.50%	10.39%	71.33%	18.28%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	77	896	61	302	1284	17	61	1212	119	69	556	142	4796
PEAK HR FACTOR :		0.972			0.928			0.948			0.896		0.983

CONTROL : Sginalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

La Cienega Blvd and Washington Blvd , Culver City

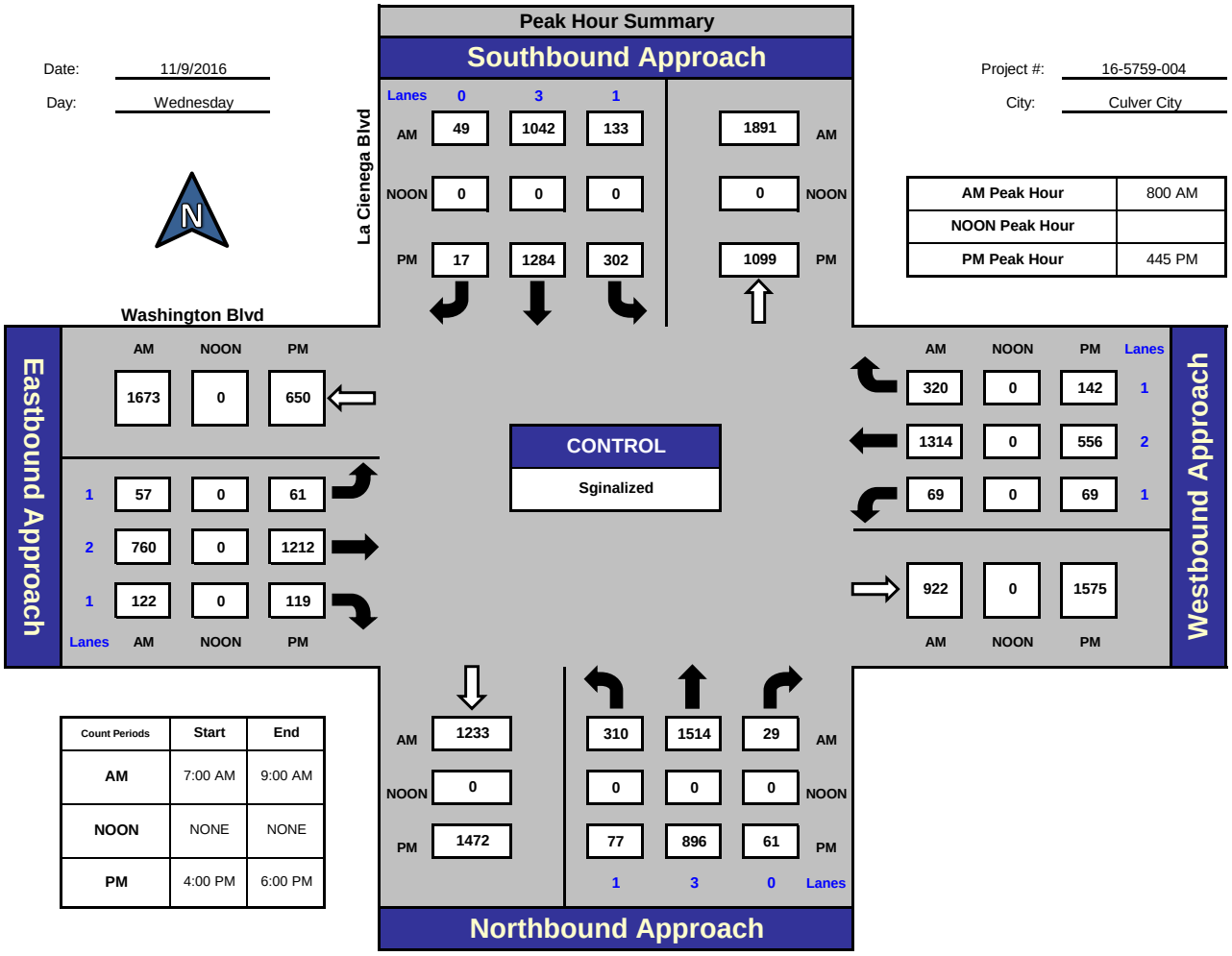
Date: 11/9/2016

Day: Wednesday

Project #: 16-5759-004

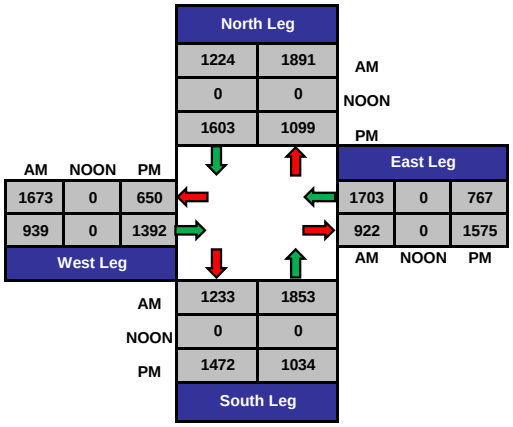
City: Culver City

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

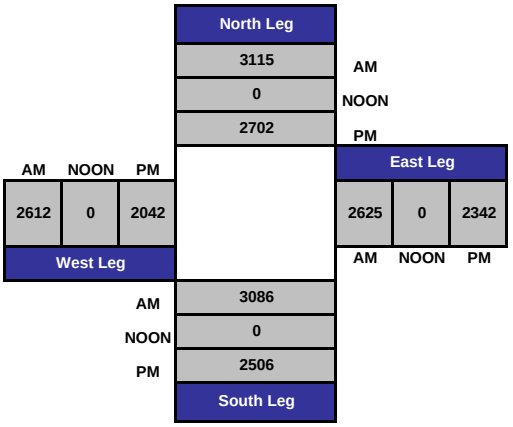


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



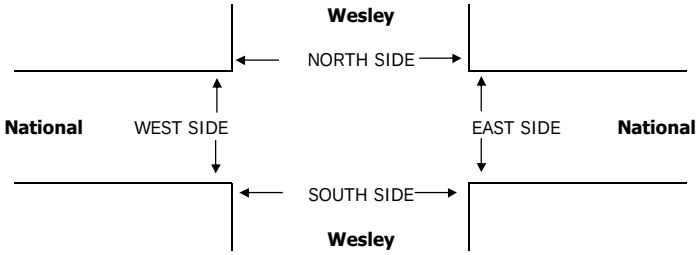
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:	LOCATION:	Culver City	PROJECT #:	SC0715
Thu, Sep 24, 15	NORTH & SOUTH:	Wesley	LOCATION #:	7
	EAST & WEST:	National	CONTROL:	SIGNAL

NOTES:

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

		NORTHBOUND Wesley			SOUTHBOUND Wesley			EASTBOUND National			WESTBOUND National			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 1	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	1	0	1	0	0	0	0	123	2	1	307	0	435
	7:15 AM	6	0	4	0	0	0	0	127	8	4	283	0	432
	7:30 AM	10	0	6	0	0	0	0	158	14	5	268	0	461
	7:45 AM	22	0	13	0	0	0	0	195	47	7	204	0	488
	8:00 AM	56	0	34	0	0	0	0	179	96	4	167	0	536
	8:15 AM	55	0	25	0	0	0	0	190	80	6	186	0	542
	8:30 AM	21	0	13	0	0	0	0	215	30	3	144	0	426
	8:45 AM	6	0	1	0	0	0	0	231	15	3	159	0	415
	VOLUMES	177	0	97	0	0	0	0	1,418	292	33	1,718	0	3,735
	APPROACH %	65%	0%	35%	0%	0%	0%	0%	83%	17%	2%	98%	0%	
	APP/DEPART	274	/	0	0	/	325	1,710	/	1,515	1,751	/	1,895	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	143	0	78	0	0	0	0	722	237	22	825	0	2,027
	APPROACH %	65%	0%	35%	0%	0%	0%	0%	75%	25%	3%	97%	0%	
	PEAK HR FACTOR		0.614			0.000			0.872			0.776		0.935
	APP/DEPART	221	/	0	0	/	259	959	/	800	847	/	968	0
PM	4:00 PM	18	0	4	0	0	0	0	210	24	4	163	0	423
	4:15 PM	31	0	5	0	0	0	0	239	30	4	182	0	491
	4:30 PM	36	0	16	0	0	0	0	254	26	3	185	0	520
	4:45 PM	26	0	4	0	0	0	0	275	15	1	196	0	517
	5:00 PM	22	0	5	0	0	0	0	330	9	2	228	0	596
	5:15 PM	9	0	4	0	0	0	0	315	15	5	214	0	562
	5:30 PM	11	0	5	0	0	0	0	257	56	3	230	0	562
	5:45 PM	30	0	11	0	0	0	0	247	12	4	249	0	553
	VOLUMES	183	0	54	0	0	0	0	2,127	187	26	1,647	0	4,230
	APPROACH %	77%	0%	23%	0%	0%	0%	0%	92%	8%	2%	98%	0%	
	APP/DEPART	237	/	0	0	/	213	2,320	/	2,181	1,673	/	1,836	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	72	0	25	0	0	0	0	1,149	92	14	921	0	2,274
	APPROACH %	74%	0%	26%	0%	0%	0%	0%	93%	7%	1%	99%	0%	
	PEAK HR FACTOR		0.591			0.000			0.916			0.924		0.954
	APP/DEPART	97	/	0	0	/	106	1,242	/	1,174	935	/	994	0



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	1	1	2	0	4	0	1	1	0	2	1	0	1	0	2
	7:15 AM	0	4	0	0	4	0	3	0	0	3	0	1	0	0	1
	7:30 AM	0	6	4	0	10	0	5	4	0	9	0	1	0	0	1
	7:45 AM	0	2	4	1	7	0	2	3	1	6	0	0	1	0	1
	8:00 AM	0	4	4	0	8	0	4	1	0	5	0	0	3	0	3
	8:15 AM	0	7	6	0	13	0	5	2	0	7	0	2	4	0	6
	8:30 AM	0	6	6	1	13	0	4	1	0	5	0	2	5	1	8
	8:45 AM	0	3	7	0	10	0	1	2	0	3	0	2	5	0	7
	TOTAL	1	33	33	2	69	0	25	14	1	40	1	8	19	1	29
PM	4:00 PM	0	4	9	0	13	0	2	8	0	10	0	2	1	0	3
	4:15 PM	1	18	13	0	32	0	14	10	0	24	1	4	3	0	8
	4:30 PM	0	6	1	0	7	0	4	0	0	4	0	2	1	0	3
	4:45 PM	0	5	5	0	10	0	4	3	0	7	0	1	2	0	3
	5:00 PM	0	18	22	0	40	0	16	20	0	36	0	2	2	0	4
	5:15 PM	0	2	8	0	10	0	1	1	0	2	0	1	7	0	8
	5:30 PM	0	6	12	0	18	0	5	10	0	15	0	1	2	0	3
	5:45 PM	1	9	3	0	13	0	4	1	0	5	1	5	2	0	8
	TOTAL	2	68	73	0	143	0	50	53	0	103	2	18	20	0	40

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-005

Day: Wednesday

City: Culver City

Date: 11/9/2016

AM

NS/EW Streets:	Hayden Ave			Hayden Ave			National Blvd			National Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.5	0	0.5	0	0	0	0	2	1	1	2	0	
7:00 AM	71	0	3	0	0	0	0	75	30	28	251	0	458
7:15 AM	55	0	5	0	0	0	0	109	24	43	221	0	457
7:30 AM	51	0	4	0	0	0	0	111	25	30	146	0	367
7:45 AM	75	0	14	0	0	0	0	132	50	41	177	0	489
8:00 AM	87	0	11	0	0	0	0	143	49	44	134	0	468
8:15 AM	53	0	8	0	0	0	0	170	43	46	149	0	469
8:30 AM	78	0	10	0	0	0	1	152	69	43	156	0	509
8:45 AM	70	0	14	0	0	0	0	175	93	52	163	0	567
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	540	0	69	0	0	0	1	1067	383	327	1397	0	3784
APPROACH %'s :	88.67%	0.00%	11.33%	#DIV/0!	#DIV/0!	#DIV/0!	0.07%	73.54%	26.40%	18.97%	81.03%	0.00%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	288	0	43	0	0	0	1	640	254	185	602	0	2013
PEAK HR FACTOR :		0.844			0.000			0.835			0.915		0.888

CONTROL : Sginalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-005

Day: Wednesday

City: Culver City

Date: 11/9/2016

PM

NS/EW Streets:	Hayden Ave			Hayden Ave			National Blvd			National Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.5	0	0.5	0	0	0	0	2	1	1	2	0	
4:00 PM	110	0	14	0	0	0	0	188	73	5	107	0	497
4:15 PM	82	0	16	0	0	0	0	225	64	5	79	0	471
4:30 PM	98	0	26	0	0	0	0	231	78	3	106	0	542
4:45 PM	91	0	27	0	0	0	0	207	79	5	108	0	517
5:00 PM	102	0	37	0	0	0	0	197	91	4	118	0	549
5:15 PM	102	0	29	0	0	0	0	161	90	5	106	0	493
5:30 PM	122	0	17	0	0	0	0	123	95	6	140	0	503
5:45 PM	87	0	13	0	0	0	1	132	123	4	101	0	461
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	794	0	179	0	0	0	1	1464	693	37	865	0	4033
APPROACH %'s :	81.60%	0.00%	18.40%	#DIV/0!	#DIV/0!	#DIV/0!	0.05%	67.84%	32.11%	4.10%	95.90%	0.00%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	393	0	119	0	0	0	0	796	338	17	438	0	2101
PEAK HR FACTOR :		0.921			0.000			0.917			0.932		0.957

CONTROL : Sginalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Hayden Ave and National Blvd , Culver City

Date: 11/9/2016

Day: Wednesday

Project #: 16-5759-005

City: Culver City

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach

Hayden Ave

Lanes	0	0	0		
AM	0	0	0	1	AM
NOON	0	0	0	0	NOON
PM	0	0	0	0	PM

National Blvd

Eastbound Approach

	AM	NOON	PM
	890	0	831
0	1	0	0
2	640	0	796
1	254	0	338
Lanes	AM	NOON	PM

CONTROL

Sginalized

Westbound Approach

	AM	NOON	PM	Lanes
	0	0	0	0
	602	0	438	2
	185	0	17	1
	683	0	915	
	AM	NOON	PM	

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Northbound Approach

AM	439	288	0	43	AM
NOON	0	0	0	0	NOON
PM	355	393	0	119	PM
		1.5	0	0.5	Lanes

Total Ins & Outs

	North Leg		
	0	1	AM
	0	0	NOON
	0	0	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
890	0	831		787	0	455
895	0	1134		683	0	915

	South Leg	
AM	439	331
NOON	0	0
PM	355	512

Total Volume Per Leg

	North Leg	
	1	AM
	0	NOON
	0	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1785	0	1965	1470	0	1370

	South Leg
AM	770
NOON	0
PM	867

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-002

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

AM

NS/EW Streets:	Jefferson Blvd			Jefferson Blvd			National Blvd			National Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	1	1	1.5	0.5	1	0.5	0.5	1	
7:00 AM	123	156	2	0	143	151	26	0	45	1	4	0	651
7:15 AM	115	158	2	4	183	158	52	0	48	0	2	1	723
7:30 AM	93	160	2	3	188	127	31	2	58	0	3	2	669
7:45 AM	61	132	3	2	264	173	63	0	46	0	1	0	745
8:00 AM	75	182	1	2	212	147	62	1	57	1	3	0	743
8:15 AM	81	221	1	3	196	122	81	2	67	0	1	1	776
8:30 AM	80	189	3	2	208	147	61	4	72	0	3	2	771
8:45 AM	83	164	10	8	218	181	66	4	78	2	5	2	821
9:00 AM	82	138	10	5	234	224	61	13	67	0	1	3	838
9:15 AM	72	129	6	10	180	200	47	9	71	3	2	0	729
9:30 AM	89	139	3	15	174	202	55	14	58	0	1	1	751
9:45 AM	107	122	1	4	138	172	43	5	69	1	5	0	667
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1061	1890	44	58	2338	2004	648	54	736	8	31	12	8884
APPROACH %'s :	35.43%	63.11%	1.47%	1.32%	53.14%	45.55%	45.06%	3.76%	51.18%	15.69%	60.78%	23.53%	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	326	712	24	18	856	674	269	23	284	2	10	8	3206
PEAK HR FACTOR :		0.876			0.836			0.960			0.556		0.956

CONTROL : Sginalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-002

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

PM

NS/EW Streets:	Jefferson Blvd			Jefferson Blvd			National Blvd			National Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	1	1	1.5	0.5	1	0.5	0.5	1	
3:00 PM	45	163	1	1	83	51	125	1	86	1	4	1	562
3:15 PM	38	157	2	0	84	58	125	1	97	1	1	0	564
3:30 PM	61	229	1	0	83	50	128	0	96	1	2	0	651
3:45 PM	36	195	4	2	96	47	148	3	100	1	1	4	637
4:00 PM	44	222	3	0	98	56	105	2	66	3	2	8	609
4:15 PM	38	246	3	2	78	44	104	0	110	0	3	5	633
4:30 PM	47	243	3	1	118	47	119	4	93	1	4	3	683
4:45 PM	41	220	1	0	88	49	142	1	107	2	5	2	658
5:00 PM	48	260	0	2	83	58	118	1	105	1	3	6	685
5:15 PM	41	271	2	1	113	47	102	2	58	2	2	6	647
5:30 PM	48	248	1	2	79	47	130	2	76	2	3	8	646
5:45 PM	37	243	2	0	72	46	105	2	99	2	1	2	611
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	524	2697	23	11	1075	600	1451	19	1093	17	31	45	7586
APPROACH %'s :	16.15%	83.14%	0.71%	0.65%	63.76%	35.59%	56.61%	0.74%	42.65%	18.28%	33.33%	48.39%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	177	994	6	4	402	201	481	8	363	6	14	17	2673
PEAK HR FACTOR :		0.937			0.914			0.852			0.925		0.976

CONTROL : Sginalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Jefferson Blvd and National Blvd , Los Angeles

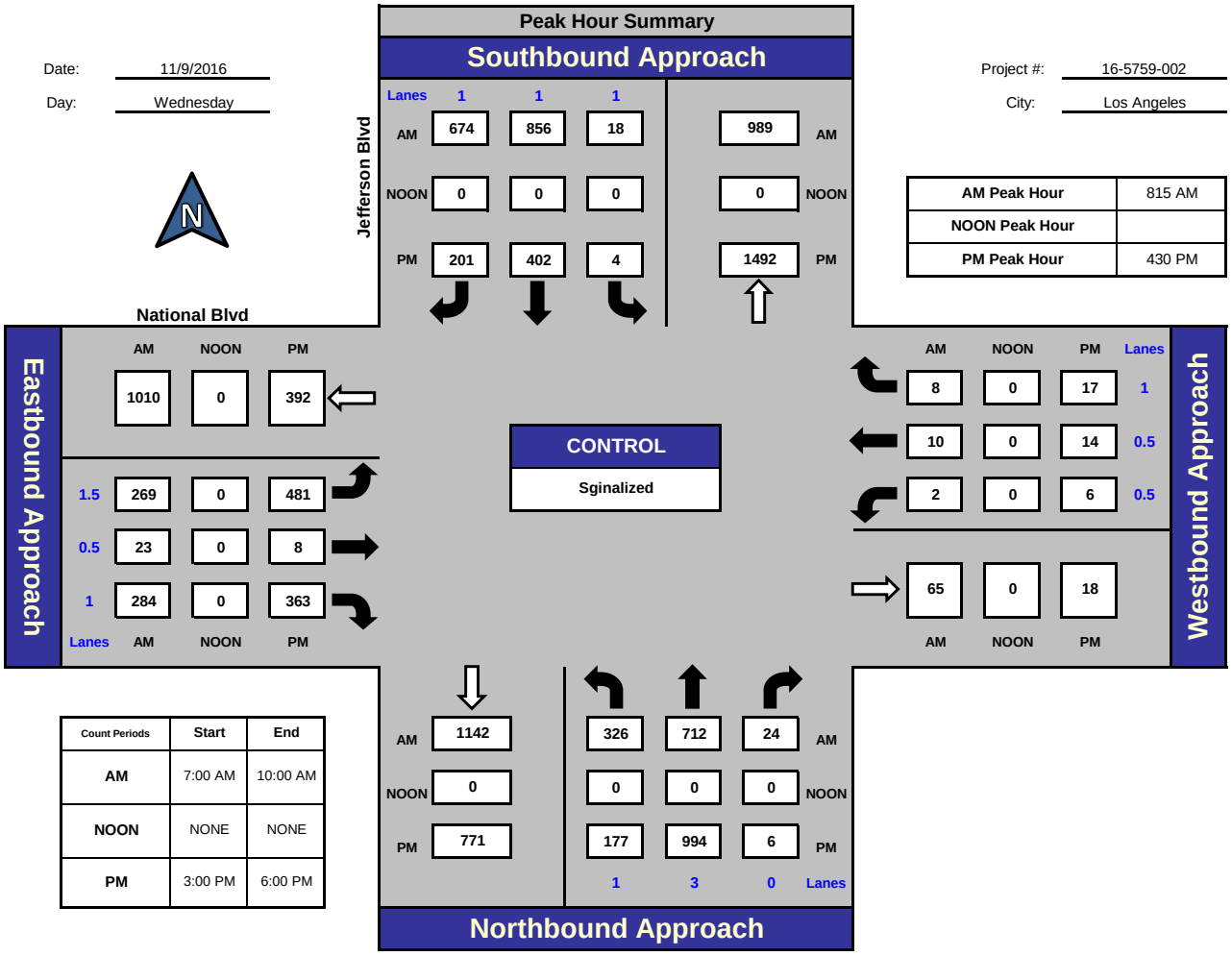
Date: 11/9/2016

Day: Wednesday

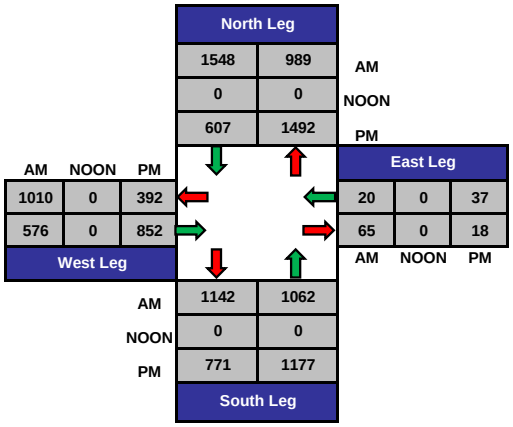
Project #: 16-5759-002

City: Los Angeles

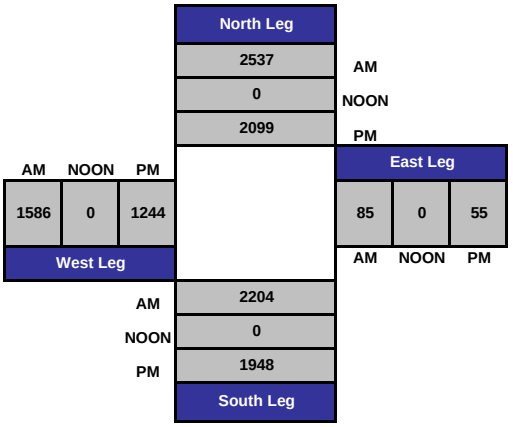
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	430 PM



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-103

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

AM

NS/EW Streets:	Jefferson Blvd			Jefferson Blvd			Higuera St/Rodeo Rd			Higuera St/Rodeo Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	1	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	59	0	0	0	0	0	0	0	0	0	59
7:15 AM	0	0	99	0	0	0	0	0	0	0	0	0	99
7:30 AM	0	0	100	0	0	0	0	0	0	0	0	0	100
7:45 AM	0	0	114	0	0	0	0	0	0	0	0	0	114
8:00 AM	0	0	109	0	0	0	0	0	0	0	0	0	109
8:15 AM	0	0	104	0	0	0	0	0	0	0	0	0	104
8:30 AM	0	0	118	0	0	0	0	0	0	0	0	0	118
8:45 AM	0	0	131	0	0	0	0	0	0	0	0	0	131
9:00 AM	0	0	94	0	0	0	0	0	0	0	0	0	94
9:15 AM	0	0	113	0	0	0	0	0	0	0	0	0	113
9:30 AM	0	0	76	0	0	0	0	0	0	0	0	0	76
9:45 AM	0	0	84	0	0	0	0	0	0	0	0	0	84
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	1201	0	0	0	0	0	0	0	0	0	1201
APPROACH %'s :	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :			462										462
PEAK HR FACTOR :													

CONTROL : Sginalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-103

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

PM

NS/EW Streets:	Jefferson Blvd			Jefferson Blvd			Higuera St/Rodeo Rd			Higuera St/Rodeo Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	1	0	0	0	0	0	0	0	0	0	
3:00 PM	0	0	235	0	0	0	0	0	0	0	0	0	235
3:15 PM	0	0	209	0	0	0	0	0	0	0	0	0	209
3:30 PM	0	0	219	0	0	0	0	0	0	0	0	0	219
3:45 PM	0	0	241	0	0	0	0	0	0	0	0	0	241
4:00 PM	0	0	251	0	0	0	0	0	0	0	0	0	251
4:15 PM	0	0	233	0	0	0	0	0	0	0	0	0	233
4:30 PM	0	0	228	0	0	0	0	0	0	0	0	0	228
4:45 PM	0	0	158	0	0	0	0	0	0	0	0	0	158
5:00 PM	0	0	212	0	0	0	0	0	0	0	0	0	212
5:15 PM	0	0	173	0	0	0	0	0	0	0	0	0	173
5:30 PM	0	0	220	0	0	0	0	0	0	0	0	0	220
5:45 PM	0	0	227	0	0	0	0	0	0	0	0	0	227
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	2606	0	0	0	0	0	0	0	0	0	2606
APPROACH %'s :	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :			771										771
PEAK HR FACTOR :													

CONTROL : Sginalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-103

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

AM

NS/EW Streets:	Jefferson Blvd			Jefferson Blvd			Higuera St/Rodeo Rd			Higuera St/Rodeo Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	1	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	59	0	0	0	0	0	0	0	0	0	59
7:15 AM	0	0	99	0	0	0	0	0	0	0	0	0	99
7:30 AM	0	0	100	0	0	0	0	0	0	0	0	0	100
7:45 AM	0	0	114	0	0	0	0	0	0	0	0	0	114
8:00 AM	0	0	109	0	0	0	0	0	0	0	0	0	109
8:15 AM	0	0	104	0	0	0	0	0	0	0	0	0	104
8:30 AM	0	0	118	0	0	0	0	0	0	0	0	0	118
8:45 AM	0	0	131	0	0	0	0	0	0	0	0	0	131
9:00 AM	0	0	94	0	0	0	0	0	0	0	0	0	94
9:15 AM	0	0	113	0	0	0	0	0	0	0	0	0	113
9:30 AM	0	0	76	0	0	0	0	0	0	0	0	0	76
9:45 AM	0	0	84	0	0	0	0	0	0	0	0	0	84
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	1201	0	0	0	0	0	0	0	0	0	1201
APPROACH %'s :	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :			462										462
PEAK HR FACTOR :													

CONTROL : Sginalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5759-103

Day: Wednesday

City: Los Angeles

Date: 11/9/2016

PM

NS/EW Streets:	Jefferson Blvd			Jefferson Blvd			Higuera St/Rodeo Rd			Higuera St/Rodeo Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	1	0	0	0	0	0	0	0	0	0	
3:00 PM	0	0	235	0	0	0	0	0	0	0	0	0	235
3:15 PM	0	0	209	0	0	0	0	0	0	0	0	0	209
3:30 PM	0	0	219	0	0	0	0	0	0	0	0	0	219
3:45 PM	0	0	241	0	0	0	0	0	0	0	0	0	241
4:00 PM	0	0	251	0	0	0	0	0	0	0	0	0	251
4:15 PM	0	0	233	0	0	0	0	0	0	0	0	0	233
4:30 PM	0	0	228	0	0	0	0	0	0	0	0	0	228
4:45 PM	0	0	158	0	0	0	0	0	0	0	0	0	158
5:00 PM	0	0	212	0	0	0	0	0	0	0	0	0	212
5:15 PM	0	0	173	0	0	0	0	0	0	0	0	0	173
5:30 PM	0	0	220	0	0	0	0	0	0	0	0	0	220
5:45 PM	0	0	227	0	0	0	0	0	0	0	0	0	227
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	2606	0	0	0	0	0	0	0	0	0	2606
APPROACH %'s :	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :			771										771
PEAK HR FACTOR :													

CONTROL : Sginalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Jefferson Blvd and Higuera St/Rodeo Rd , Los Angeles

Date: 11/9/2016

Day: Wednesday

Project #: 16-5759-003

City: Los Angeles

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach — Jefferson Blvd

Lanes	0	2	1		
AM	54	834	138	1146	AM
NOON	0	0	0	0	NOON
PM	46	583	164	1091	PM

Eastbound Approach — Higuera St/Rodeo Rd

Lanes	AM	NOON	PM
	823	0	261
1	35	0	28
3	146	0	629
0	55	0	128

Westbound Approach

Lanes	AM	NOON	PM
1	366	0	114
1	649	0	181
2	896	0	407
	285	0	826

CONTROL

Sginalized

Northbound Approach

Lanes	1	2	1		
AM	1785	120	745	1	AM
NOON	0	0	0	0	NOON
PM	1118	34	949	33	PM

Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs

	AM	NOON	PM
North Leg	1026	0	793
	1146	0	1091
East Leg	1911	0	702
	285	0	826
South Leg	1785	0	1118
	866	0	1016
West Leg	823	0	261
	236	0	785

Total Volume Per Leg

	AM	NOON	PM
North Leg	2172	0	1884
East Leg	2196	0	1528
South Leg	2651	0	2134
West Leg	1059	0	1046

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Jefferson Blvd and Higuera St/Rodeo Rd , Los Angeles

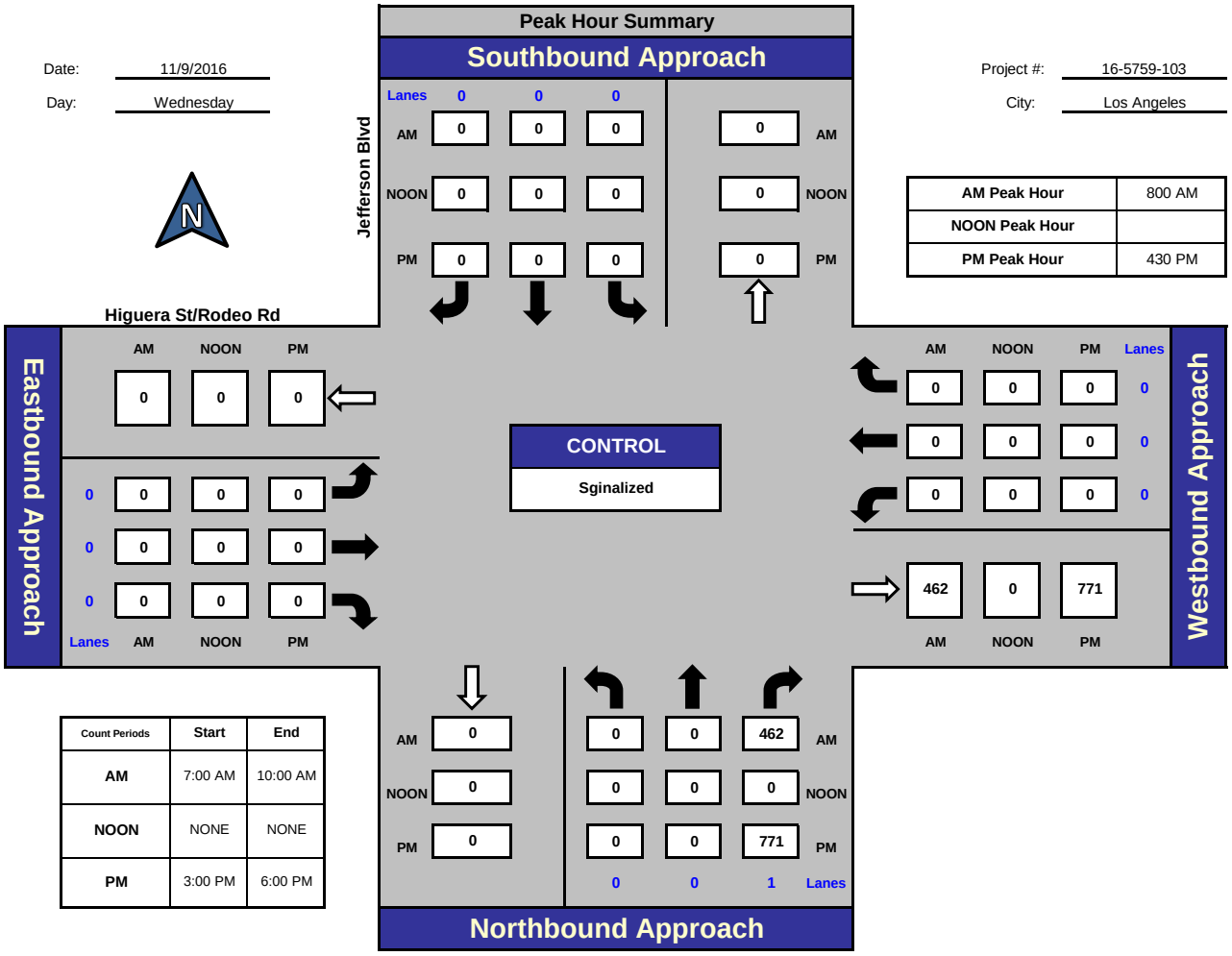
Date: 11/9/2016

Day: Wednesday

Project #: 16-5759-103

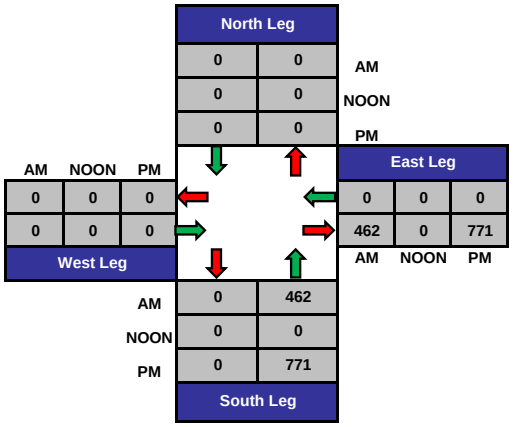
City: Los Angeles

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

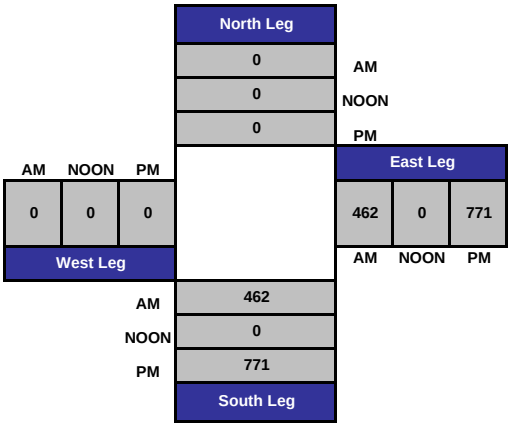


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



INTERSECTION TURNING MOVEMENT COUNTS

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

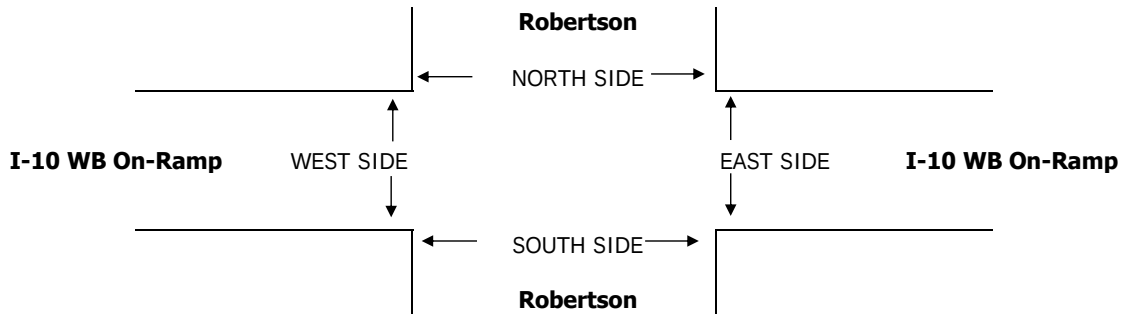
DATE:				
Thu, Mar 3, 16	LOCATION:	Culver	PROJECT #:	SC1603
	NORTH & SOUTH:	Robertson	LOCATION #:	3
	EAST & WEST:	I-10 WB On-Ramp	CONTROL:	STOP S/W

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Robertson			SOUTHBOUND Robertson			EASTBOUND I-10 WB On-Ramp			WESTBOUND I-10 WB On-Ramp			
	LANES:	NL X	NT X	NR X	SL X	ST 2	SR 1	EL X	ET X	ER X	WL 0.5	WT 0.5	WR 1	TOTAL
AM	7:00 AM	0	0	0	0	44	181	0	0	0	4	150	113	492
	7:15 AM	0	0	0	0	40	208	0	0	0	6	165	153	572
	7:30 AM	0	0	0	0	56	225	0	0	0	3	153	171	608
	7:45 AM	0	0	0	0	62	236	0	0	0	5	140	165	608
	8:00 AM	0	0	0	0	54	211	0	0	0	3	155	182	605
	8:15 AM	0	0	0	0	63	202	0	0	0	7	142	186	600
	8:30 AM	0	0	0	0	55	213	0	0	0	5	139	229	641
	8:45 AM	0	0	0	0	68	207	0	0	0	4	146	192	617
	VOLUMES	0	0	0	0	442	1,683	0	0	0	37	1,190	1,391	4,743
	APPROACH %	0%	0%	0%	0%	21%	79%	0%	0%	0%	1%	45%	53%	
	APP/DEPART	0	/	1,391	2,125	/	479	0	/	0	2,618	/	2,873	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	0	0	0	240	833	0	0	0	19	582	789	2,463
	APPROACH %	0%	0%	0%	0%	22%	78%	0%	0%	0%	1%	42%	57%	
	PEAK HR FACTOR		0.000			0.975			0.000			0.932		0.961
	APP/DEPART	0	/	789	1,073	/	259	0	/	0	1,390	/	1,415	0
PM	4:00 PM	0	0	0	0	94	145	0	0	0	7	108	131	485
	4:15 PM	0	0	0	0	119	119	0	0	0	6	76	139	459
	4:30 PM	0	0	0	0	114	129	0	0	0	9	100	140	492
	4:45 PM	0	0	0	0	122	111	0	0	0	15	106	134	488
	5:00 PM	0	0	0	0	112	132	0	0	0	5	110	126	485
	5:15 PM	0	0	0	0	119	134	0	0	0	11	121	134	519
	5:30 PM	0	0	0	0	115	149	0	0	0	17	109	164	554
	5:45 PM	0	0	0	0	138	117	0	0	0	5	134	143	537
	VOLUMES	0	0	0	0	933	1,036	0	0	0	75	864	1,111	4,019
	APPROACH %	0%	0%	0%	0%	47%	53%	0%	0%	0%	4%	42%	54%	
	APP/DEPART	0	/	1,111	1,969	/	1,008	0	/	0	2,050	/	1,900	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	0	0	0	484	532	0	0	0	38	474	567	2,095
	APPROACH %	0%	0%	0%	0%	48%	52%	0%	0%	0%	4%	44%	53%	
	PEAK HR FACTOR		0.000			0.962			0.000			0.930		0.945
	APP/DEPART	0	/	567	1,016	/	522	0	/	0	1,079	/	1,006	0



INTERSECTION TURNING MOVEMENT COUNTS

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

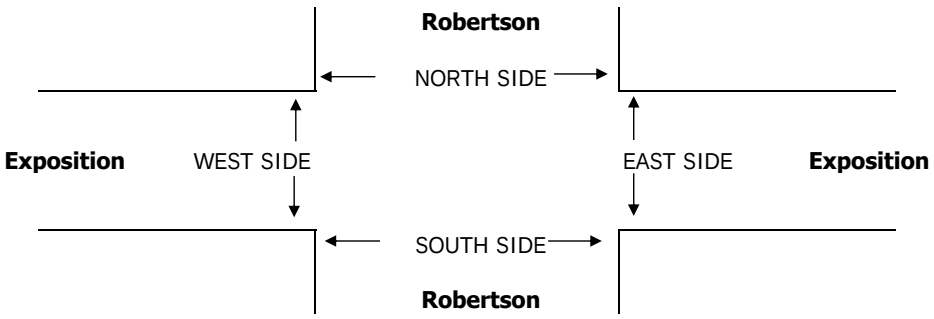
DATE:	LOCATION:	Culver	PROJECT #:	SC1603
Thu, Mar 3, 16	NORTH & SOUTH:	Robertson	LOCATION #:	2
	EAST & WEST:	Exposition	CONTROL:	STOP S/E

NOTES:

NR - I-10 WB Off Ramp

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

		NORTHBOUND Robertson			SOUTHBOUND Robertson			EASTBOUND Exposition			WESTBOUND Exposition			
	LANES:	NL X	NT X	NR 1	SL 1	ST X	SR 1	EL X	ET 1	ER X	WL X	WT X	WR X	TOTAL
AM	7:00 AM	0	0	152	43	0	5	0	4	0	0	0	0	204
	7:15 AM	0	0	179	41	0	1	0	3	0	0	0	0	224
	7:30 AM	0	0	211	56	0	1	0	0	0	0	0	0	268
	7:45 AM	0	0	246	60	0	4	0	1	0	0	0	0	311
	8:00 AM	0	0	300	53	0	1	0	0	0	0	0	0	354
	8:15 AM	0	0	310	68	0	5	0	1	0	0	0	0	384
	8:30 AM	0	0	316	61	0	1	0	0	0	0	0	0	378
	8:45 AM	0	0	321	65	0	4	0	3	0	0	0	0	393
	VOLUMES	0	0	2,035	447	0	22	0	12	0	0	0	0	2,516
	APPROACH %	0%	0%	100%	95%	0%	5%	0%	100%	0%	0%	0%	0%	
	APP/DEPART	2,035	/	0	469	/	0	12	/	2,494	0	/	22	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	0	1,247	247	0	11	0	4	0	0	0	0	1,509
	APPROACH %	0%	0%	100%	96%	0%	4%	0%	100%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.971			0.884			0.333			0.000		0.960
	APP/DEPART	1,247	/	0	258	/	0	4	/	1,498	0	/	11	0
PM	4:00 PM	0	0	158	89	0	17	0	17	0	0	0	0	281
	4:15 PM	0	0	126	111	0	15	0	17	0	0	0	0	269
	4:30 PM	0	0	133	106	0	14	0	11	0	0	0	0	264
	4:45 PM	0	0	137	125	0	16	0	21	0	0	0	0	299
	5:00 PM	0	0	136	108	0	11	0	12	0	0	0	0	267
	5:15 PM	0	0	115	130	0	10	0	10	0	0	0	0	265
	5:30 PM	0	0	129	111	0	15	0	16	0	0	0	0	271
	5:45 PM	0	0	123	127	0	8	0	15	0	0	0	0	273
	VOLUMES	0	0	1,057	907	0	106	0	119	0	0	0	0	2,189
	APPROACH %	0%	0%	100%	90%	0%	10%	0%	100%	0%	0%	0%	0%	
	APP/DEPART	1,057	/	0	1,013	/	0	119	/	2,083	0	/	106	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	0	0	554	431	0	62	0	66	0	0	0	0	1,113
	APPROACH %	0%	0%	100%	87%	0%	13%	0%	100%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.877			0.874			0.786			0.000		0.931
	APP/DEPART	554	/	0	493	/	0	66	/	1,051	0	/	62	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: Video & AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

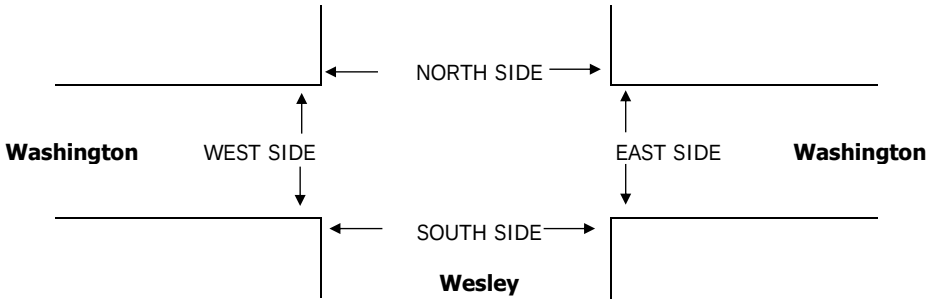
DATE:					
Thu, Sep 24, 15	LOCATION:	Culver City	PROJECT #:	SC0715	
	NORTH & SOUTH:	Wesley	LOCATION #:	27	
	EAST & WEST:	Washington	CONTROL:	UNSIGNAL	

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Wesley			SOUTHBOUND			EASTBOUND Washington			WESTBOUND Washington			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 0	SR 0	EL 0	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	2	0	1	0	0	0	0	96	3	5	230	0	337
7:15 AM	2	0	0	0	0	0	0	118	5	4	303	0	432
7:30 AM	0	0	1	0	0	0	0	157	5	1	400	0	564
7:45 AM	0	0	1	0	0	0	0	195	4	5	452	0	657
8:00 AM	1	0	1	0	0	0	0	167	6	2	345	0	522
8:15 AM	1	0	2	0	0	0	0	183	5	3	343	0	537
8:30 AM	4	0	1	0	0	0	0	158	9	2	299	0	473
8:45 AM	2	0	0	0	0	0	0	162	0	4	434	0	602
VOLUMES	12	0	7	0	0	0	0	1,236	37	26	2,806	0	4,124
APPROACH %	63%	0%	37%	0%	0%	0%	0%	97%	3%	1%	99%	0%	
APP/DEPART	19	/	0	0	/	63	1,273	/	1,243	2,832	/	2,818	0
BEGIN PEAK HR		7:30 AM											
VOLUMES	2	0	5	0	0	0	0	702	20	11	1,540	0	2,280
APPROACH %	29%	0%	71%	0%	0%	0%	0%	97%	3%	1%	99%	0%	
PEAK HR FACTOR		0.583			0.000			0.907			0.848		0.868
APP/DEPART	7	/	0	0	/	31	722	/	707	1,551	/	1,542	0
4:00 PM	8	0	11	0	0	0	0	268	2	1	183	0	473
4:15 PM	2	0	11	0	0	0	0	258	3	1	176	0	451
4:30 PM	7	0	7	0	0	0	0	292	2	3	173	0	484
4:45 PM	4	0	3	0	0	0	0	348	3	2	197	0	557
5:00 PM	1	0	4	0	0	0	0	348	1	1	283	0	638
5:15 PM	0	0	2	0	0	0	0	347	0	1	258	0	608
5:30 PM	4	0	3	0	0	0	0	290	1	2	255	0	555
5:45 PM	2	0	1	0	0	0	0	361	1	1	207	0	573
VOLUMES	28	0	42	0	0	0	0	2,512	13	12	1,732	0	4,339
APPROACH %	40%	0%	60%	0%	0%	0%	0%	99%	1%	1%	99%	0%	
APP/DEPART	70	/	0	0	/	24	2,525	/	2,555	1,744	/	1,760	0
BEGIN PEAK HR		5:00 PM											
VOLUMES	7	0	10	0	0	0	0	1,346	3	5	1,003	0	2,374
APPROACH %	41%	0%	59%	0%	0%	0%	0%	100%	0%	0%	100%	0%	
PEAK HR FACTOR		0.607			0.000			0.932			0.887		0.930
APP/DEPART	17	/	0	0	/	7	1,349	/	1,357	1,008	/	1,010	0



INTERSECTION TURNING MOVEMENT COUNTS

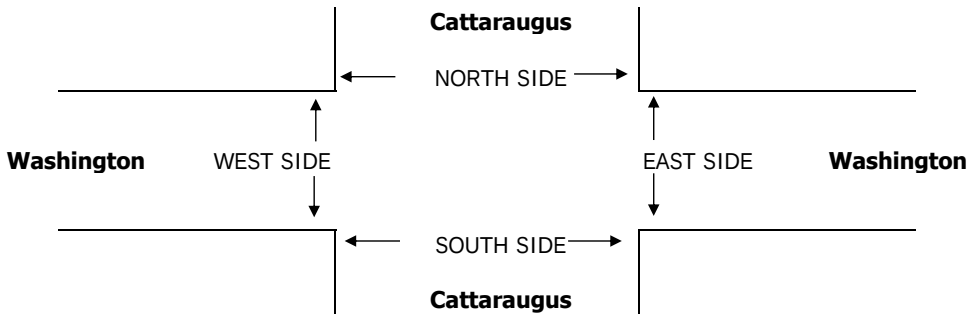
PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

DATE:	LOCATION:	Culver	PROJECT #:	SC1603
Thu, Mar 3, 16	NORTH & SOUTH:	Cattaraugus	LOCATION #:	1
	EAST & WEST:	Washington	CONTROL:	STOP N\S

NOTES:

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

		NORTHBOUND Cattaraugus			SOUTHBOUND Cattaraugus			EASTBOUND Washington			WESTBOUND Washington			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL
AM	7:00 AM	1	1	2	7	0	5	3	115	2	3	320	63	522
	7:15 AM	4	0	0	10	0	8	5	112	1	0	366	81	587
	7:30 AM	4	0	3	10	0	18	1	163	3	6	328	107	643
	7:45 AM	2	1	2	18	0	19	8	149	4	1	380	108	692
	8:00 AM	0	2	4	14	1	18	14	175	3	2	337	75	645
	8:15 AM	0	2	2	16	1	16	11	200	2	4	322	75	651
	8:30 AM	1	4	0	4	0	15	9	189	2	7	318	102	651
	8:45 AM	3	1	2	8	1	19	14	174	1	2	340	89	654
	VOLUMES	15	11	15	87	3	118	65	1,277	18	25	2,711	700	5,045
	APPROACH %	37%	27%	37%	42%	1%	57%	5%	94%	1%	1%	79%	20%	
	APP/DEPART	41	/	771	208	/	40	1,360	/	1,385	3,436	/	2,849	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	3	9	8	52	2	68	42	713	11	14	1,357	360	2,639
	APPROACH %	15%	45%	40%	43%	2%	56%	5%	93%	1%	1%	78%	21%	
	PEAK HR FACTOR		0.833			0.824			0.899			0.885		0.953
	APP/DEPART	20	/	409	122	/	24	766	/	776	1,731	/	1,430	0
PM	4:00 PM	3	0	2	20	3	12	6	278	4	0	158	18	504
	4:15 PM	0	1	2	22	1	15	7	328	4	0	128	21	529
	4:30 PM	0	0	1	21	0	11	10	323	6	4	169	9	554
	4:45 PM	2	0	1	19	0	13	11	303	6	1	178	9	543
	5:00 PM	0	0	1	28	2	16	12	293	7	0	165	14	538
	5:15 PM	3	0	1	26	0	14	5	286	4	2	171	21	533
	5:30 PM	1	0	1	17	3	11	10	288	8	2	185	15	541
	5:45 PM	1	1	1	19	2	18	10	277	12	2	161	9	513
	VOLUMES	10	2	10	172	11	110	71	2,376	51	11	1,315	116	4,255
	APPROACH %	45%	9%	45%	59%	4%	38%	3%	95%	2%	1%	91%	8%	
	APP/DEPART	22	/	184	293	/	69	2,498	/	2,562	1,442	/	1,440	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	5	0	4	94	2	54	38	1,205	23	7	683	53	2,168
	APPROACH %	56%	0%	44%	63%	1%	36%	3%	95%	2%	1%	92%	7%	
	PEAK HR FACTOR		0.563			0.815			0.934			0.957		0.978
	APP/DEPART	9	/	89	150	/	29	1,266	/	1,306	743	/	744	0



APPENDIX D

Level of Service Worksheets

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
1	East-West Street:	I-10 WB Off-Ramp - Kincardine Av	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases		2			2			2				2				2		
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0			0				0				0		
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- EB-- 0 WB--	0		NB-- 0 SB-- EB-- 0 WB--	0		NB-- 0 SB-- EB-- 0 WB--	0			NB-- 0 SB-- EB-- 0 WB--	0			NB-- 0 SB-- EB-- 0 WB--	0		
	ATSAC-1 or ATSAC+ATCS-2?		2			2			2				2				2		
	Override Capacity		0			0			0				0				0		
NORTHBOUND	Left	58	1	**58**	0	58	**58**	0	59	1	**59**	0	59	1	**59**	0	59	1	**59**
	Left-Through		0							0				0				0	
	Through	1263	2	632	1	1264	632	42	1330	2	665	1	1331	2	666	0	1331	2	666
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	1401	1	**739**	5	1406	**742**	49	1478	1	**779**	5	1483	1	**781**	0	1483	1	**781**
	Through-Right		1							1				1				1	
	Right	77	0	77	0	77	77	0	79	0	79	0	79	0	79	0	79	0	79
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	109	0	109	0	109	109	0	111	0	111	0	111	0	111	0	111	0	111
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	60	0	**169**	0	60	**169**	0	61	0	**172**	0	61	0	**172**	0	61	0	**172**
	Left-Through-Right		0							0				0				0	
	Left-Right		1							1				1				1	
WESTBOUND	Left	66	0	**66**	4	70	**70**	135	202	0	**202**	4	206	0	**206**	0	206	0	**206**
	Left-Through		1							1				1				1	
	Through	48	0	114	0	48	118	0	49	0	251	0	49	0	255	0	49	0	255
	Through-Right		0							0				0				0	
	Right	104	1	104	0	104	104	0	106	1	106	0	106	1	106	0	106	1	106
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		797	North-South:		800	North-South:			838	North-South:			840	North-South:			840
		East-West:		235	East-West:		239	East-West:			374	East-West:			378	East-West:			378
		SUM:		1032	SUM:		1039	SUM:			1212	SUM:			1218	SUM:			1218
	VOLUME/CAPACITY (V/C) RATIO:			0.688			0.693				0.808				0.812				0.812
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.588			0.593				0.708				0.712				0.712
	LEVEL OF SERVICE (LOS):			A			A				C				C				C

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.004 — Δ*v/c* after mitigation: 0.004

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
1	East-West Street:	I-10 WB Off-Ramp - Kincardine Av	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2					2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	46	1	**46**	0	46	**46**	0	47	1	**47**	0	47	1	**47**	0	47	1	**47**
	Left-Through		0							0				0				0	
	Through	893	2	447	5	898	449	70	981	2	491	5	986	2	493	0	986	2	493
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	1482	1	**763**	2	1484	**764**	38	1550	1	**798**	2	1552	1	**799**	0	1552	1	**799**
	Through-Right		1							1				1				1	
	Right	44	0	44	0	44	44	0	45	0	45	0	45	0	45	0	45	0	45
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	72	0	**72**	0	72	**72**	0	73	0	**73**	0	73	0	**73**	0	73	0	**73**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	65	0	137	0	65	137	0	66	0	139	0	66	0	139	0	66	0	139
	Left-Through-Right		0							0				0				0	
	Left-Right		1							1				1				1	
WESTBOUND	Left	281	0	281	2	283	283	83	370	0	370	2	372	0	372	0	372	0	372
	Left-Through		1							1				1				1	
	Through	40	0	321	0	40	323	0	41	0	411	0	41	0	413	0	41	0	413
	Through-Right		0							0				0				0	
	Right	527	1	**527**	0	527	**527**	0	538	1	**538**	0	538	1	**538**	0	538	1	**538**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES		*North-South:*	809		*North-South:*	810		*North-South:*	845			*North-South:*	846			*North-South:*	846	
			East-West:	599		*East-West:*	599		*East-West:*	611			*East-West:*	611			*East-West:*	611	
			SUM:	1408		*SUM:*	1409		*SUM:*	1456			*SUM:*	1457			*SUM:*	1457	
	VOLUME/CAPACITY *(V/C)* RATIO:			0.939			0.939			0.971				0.971				0.971	
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.839**			**0.839**			**0.871**				**0.871**				**0.871**	
	LEVEL OF SERVICE (LOS):			**D**			**D**			**D**				**D**				**D**	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
2	East-West Street:	National Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

No. of Phases			4			4			4			4			4			4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	75	1	75	0	75	75	13	90	1	90	0	90	1	90	0	90	1	90
Left-Through		0							0				0				0	
Through	713	1	**372**	0	713	**372**	4	731	1	**393**	0	731	1	**393**	0	731	1	**393**
Through-Right		1							1				1				1	
Right	31	0	31	0	31	31	23	55	0	55	0	55	0	55	0	55	0	55
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	522	2	**287**	9	531	**292**	72	604	2	**332**	9	613	2	**337**	0	613	2	**337**
Left-Through		0							0				0				0	
Through	923	1	525	0	923	525	110	1052	1	592	0	1052	1	592	0	1052	1	592
Through-Right		1							1				1				1	
Right	126	0	126	0	126	126	2	131	0	131	0	131	0	131	0	131	0	131
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	263	1	**263**	0	263	**263**	4	272	1	**272**	0	272	1	**272**	0	272	1	**272**
Left-Through		0							0				0				0	
Through	654	1	470	1	655	471	50	717	1	510	1	718	1	510	0	718	1	510
Through-Right		1							1				1				1	
Right	286	0	286	0	286	286	10	302	0	302	0	302	0	302	0	302	0	302
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	131	1	131	0	131	131	4	138	1	138	0	138	1	138	0	138	1	138
Left-Through		0							0				0				0	
Through	442	1	**442**	0	442	**442**	20	471	1	**471**	0	471	1	**471**	0	471	1	**471**
Through-Right		0							0				0				0	
Right	316	1	29	1	317	25	34	356	1	24	1	357	1	20	0	357	1	20
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		659	*North-South:*		664	*North-South:*			725	*North-South:*			730	*North-South:*			730
	East-West:		705	*East-West:*		705	*East-West:*			743	*East-West:*			743	*East-West:*			743
	SUM:		1364	*SUM:*		1369	*SUM:*			1468	*SUM:*			1473	*SUM:*			1473
VOLUME/CAPACITY *(V/C)* RATIO:			0.992			0.996				1.068				1.071				1.071
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.892**			**0.896**				**0.968**				**0.971**				**0.971**
LEVEL OF SERVICE (LOS):			D			D				E				E				E

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
2	East-West Street:	National Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

No. of Phases			4			4			4			4			4			4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	EB--	0	WB-- 3	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	40	1	40	0	40	40	11	52	1	52	0	52	1	52	0	52	1	52
Left-Through		0							0				0				0	
Through	480	1	**309**	0	480	**309**	19	509	1	**355**	0	509	1	**355**	0	509	1	**355**
Through-Right		1							1				1				1	
Right	138	0	138	0	138	138	59	200	0	200	0	200	0	200	0	200	0	200
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	644	2	**354**	4	648	**356**	53	710	2	**391**	4	714	2	**393**	0	714	2	**393**
Left-Through		0							0				0				0	
Through	970	1	588	0	970	588	63	1052	1	633	0	1052	1	633	0	1052	1	633
Through-Right		1							1				1				1	
Right	206	0	206	0	206	206	3	213	0	213	0	213	0	213	0	213	0	213
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	150	1	150	0	150	150	2	155	1	155	0	155	1	155	0	155	1	155
Left-Through		0							0				0				0	
Through	938	1	**510**	0	938	**510**	46	1003	1	**550**	0	1003	1	**550**	0	1003	1	**550**
Through-Right		1							1				1				1	
Right	81	0	81	0	81	81	14	97	0	97	0	97	0	97	0	97	0	97
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	88	1	**88**	0	88	**88**	9	99	1	**99**	0	99	1	**99**	0	99	1	**99**
Left-Through		0							0				0				0	
Through	289	1	289	1	290	290	40	335	1	335	1	336	1	336	0	336	1	336
Through-Right		0							0				0				0	
Right	303	1	0	5	308	0	49	358	1	0	5	363	1	0	0	363	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		663	*North-South:*		665	*North-South:*			746	*North-South:*			748	*North-South:*			748
	East-West:		598	*East-West:*		598	*East-West:*			649	*East-West:*			649	*East-West:*			649
	SUM:		1261	*SUM:*		1263	*SUM:*			1395	*SUM:*			1397	*SUM:*			1397
VOLUME/CAPACITY *(V/C)* RATIO:			0.917			0.919				1.015				1.016				1.016
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.817**			**0.819**				**0.915**				**0.916**				**0.916**
LEVEL OF SERVICE (LOS):			**D**			**D**				**E**				**E**				**E**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	National Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
3	East-West Street:	I-10 Freeway Eastbound On-Ramp	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	35	1	**35**	1	36	**36**	33	69	1	**69**	1	70	1	**70**	0	70	1	**70**
Left-Through		0							0				0				0	
Through	903	2	452	1	904	452	58	979	2	490	1	980	2	490	0	980	2	490
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	720	2	360	10	730	365	130	864	2	432	10	874	2	437	0	874	2	437
Through-Right		0							0				0				0	
Right	450	1	**450**	0	450	**450**	15	474	1	**474**	0	474	1	**474**	0	474	1	**474**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
Left-Through		0							0				0				0	
Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		485	*North-South:*		486	*North-South:*			543	*North-South:*			544	*North-South:*			544
	East-West:		0	*East-West:*		0	*East-West:*			0	*East-West:*			0	*East-West:*			0
	SUM:		485	*SUM:*		486	*SUM:*			543	*SUM:*			544	*SUM:*			544
VOLUME/CAPACITY *(V/C)* RATIO:			0.323			0.324				0.362				0.363				0.363
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.223			0.224				0.262				0.263				0.263
LEVEL OF SERVICE (LOS):			A			A				A				A				A

	NB--	SB--	EB--	WB--
Right Turns: FREE-1, NRTOR-2 or OLA-3?	0	2	0	0
Existing Plus Project	0	2	0	0
Future Condition W/O Project	0	2	0	0
Future Condition W/ Project	0	2	0	0
Future W/ Project W/ Mitigation	0	2	0	0

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	2
Override Capacity	0	0	0	0	0

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	National Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
3	East-West Street:	I-10 Freeway Eastbound On-Ramp	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2					2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- EB-- 0 WB--		2 0	NB-- 0 SB-- EB-- 0 WB--		2 0	NB-- 0 SB-- EB-- 0 WB--		2 0		NB-- 0 SB-- EB-- 0 WB--		2 0		NB-- 0 SB-- EB-- 0 WB--		2 0
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	116	1	**116**	5	121	**121**	67	185	1	**185**	5	190	1	**190**	0	190	1	**190**
	Left-Through		0							0				0				0	
	Through	674	2	337	6	680	340	97	785	2	393	6	791	2	396	0	791	2	396
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	971	2	486	4	975	488	105	1096	2	548	4	1100	2	550	0	1100	2	550
	Through-Right		0							0				0				0	
	Right	712	1	**712**	0	712	**712**	53	779	1	**779**	0	779	1	**779**	0	779	1	**779**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		828	North-South:		833	North-South:			964	North-South:			969	North-South:			969
		East-West:		0	East-West:		0	East-West:			0	East-West:			0	East-West:			0
		SUM:		828	SUM:		833	SUM:			964	SUM:			969	SUM:			969
	VOLUME/CAPACITY (V/C) RATIO:			0.552			0.555				0.643				0.646				0.646
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.452			0.455				0.543				0.546				0.546
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.003 — Δ*v/c* after mitigation: 0.003

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Bagley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
4	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	67	1	**67**	0	67	**67**	2	70	1	**70**	0	70	1	**70**	0	70	1	**70**
Left-Through		0							0				0				0	
Through	254	0	283	0	254	283	0	259	0	290	0	259	0	290	0	259	0	290
Through-Right		1							1				1				1	
Right	29	0	0	0	29	0	1	31	0	0	0	31	0	0	0	31	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	64	0	64	0	64	64	1	66	0	66	0	66	0	66	0	66	0	66
Left-Through		0							0				0				0	
Through	246	0	**452**	0	246	**452**	3	254	0	**466**	0	254	0	**466**	0	254	0	**466**
Through-Right		0							0				0				0	
Right	142	0	0	0	142	0	1	146	0	0	0	146	0	0	0	146	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	60	1	**60**	0	60	**60**	3	64	1	**64**	0	64	1	**64**	0	64	1	**64**
Left-Through		0							0				0				0	
Through	1350	2	459	12	1362	463	146	1523	2	528	12	1535	2	532	0	1535	2	532
Through-Right		1							1				1				1	
Right	26	0	26	0	26	26	34	61	0	61	0	61	0	61	0	61	0	61
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	53	1	53	0	53	53	2	56	1	56	0	56	1	56	0	56	1	56
Left-Through		0							0				0				0	
Through	1445	3	**482**	3	1448	**483**	117	1591	3	**530**	3	1594	3	**531**	0	1594	3	**531**
Through-Right		0							0				0				0	
Right	30	1	30	0	30	30	1	32	1	32	0	32	1	32	0	32	1	32
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		519	*North-South:*		519	*North-South:*			536	*North-South:*			536	*North-South:*			536
	East-West:		542	*East-West:*		543	*East-West:*			594	*East-West:*			595	*East-West:*			595
	SUM:		1061	*SUM:*		1062	*SUM:*			1130	*SUM:*			1131	*SUM:*			1131
VOLUME/CAPACITY *(V/C)* RATIO:			0.772			0.772				0.822				0.823				0.823
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.672**			**0.672**				**0.722**				**0.723**				**0.723**
LEVEL OF SERVICE (LOS):			**B**			**B**				**C**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Bagley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
4	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	51	1	**51**	0	51	**51**	10	62	1	**62**	0	62	1	**62**	0	62	1	**62**
Left-Through		0							0				0				0	
Through	113	0	150	0	113	150	2	117	0	158	0	117	0	158	0	117	0	158
Through-Right		1							1				1				1	
Right	37	0	0	0	37	0	3	41	0	0	0	41	0	0	0	41	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	64	0	64	0	64	64	1	66	0	66	0	66	0	66	0	66	0	66
Left-Through		0							0				0				0	
Through	271	0	**406**	0	271	**406**	1	277	0	**417**	0	277	0	**417**	0	277	0	**417**
Through-Right		0							0				0				0	
Right	71	0	0	0	71	0	2	74	0	0	0	74	0	0	0	74	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	117	1	**117**	0	117	**117**	1	120	1	**120**	0	120	1	**120**	0	120	1	**120**
Left-Through		0							0				0				0	
Through	1248	2	436	5	1253	438	148	1421	2	505	5	1426	2	507	0	1426	2	507
Through-Right		1							1				1				1	
Right	61	0	61	0	61	61	33	95	0	95	0	95	0	95	0	95	0	95
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	112	1	112	0	112	112	2	116	1	116	0	116	1	116	0	116	1	116
Left-Through		0							0				0				0	
Through	1620	3	**540**	14	1634	**545**	182	1835	3	**612**	14	1849	3	**616**	0	1849	3	**616**
Through-Right		0							0				0				0	
Right	45	1	45	0	45	45	1	47	1	47	0	47	1	47	0	47	1	47
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		457	*North-South:*		457	*North-South:*			479	*North-South:*			479	*North-South:*			479
	East-West:		657	*East-West:*		662	*East-West:*			732	*East-West:*			736	*East-West:*			736
	SUM:		1114	*SUM:*		1119	*SUM:*			1211	*SUM:*			1215	*SUM:*			1215
VOLUME/CAPACITY *(V/C)* RATIO:			0.810			0.814				0.881				0.884				0.884
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.710			0.714				0.781				0.784				0.784
LEVEL OF SERVICE (LOS):			C			C				C				C				C

No. of Phases	4	4	4	4	4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	2
Override Capacity	0	0	0	0	0

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Culver Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
5	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	36	1	36	0	36	36	4	41	1	41	0	41	1	41	0	41	1	41
Left-Through		0							0				0				0	
Through	43	1	43	0	43	43	0	44	1	44	0	44	1	44	0	44	1	44
Through-Right		0							0				0				0	
Right	683	2	**196**	0	683	**196**	77	774	2	**166**	0	774	2	**166**	0	774	2	**166**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	143	1	**105**	0	143	**105**	0	146	1	**107**	0	146	1	**107**	0	146	1	**107**
Left-Through		0							0				0				0	
Through	37	0	105	0	37	105	0	38	0	107	0	38	0	107	0	38	0	107
Through-Right		0							0				0				0	
Right	29	0	0	0	29	0	0	30	0	0	0	30	0	0	0	30	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	20	1	20	0	20	20	0	20	1	20	0	20	1	20	0	20	1	20
Left-Through		0							0				0				0	
Through	1298	3	**433**	12	1310	**437**	149	1473	3	**491**	12	1485	3	**495**	0	1485	3	**495**
Through-Right		0							0				0				0	
Right	13	1	0	0	13	0	0	13	1	0	0	13	1	0	0	13	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	327	2	**180**	0	327	**180**	138	472	2	**260**	0	472	2	**260**	0	472	2	**260**
Left-Through		0							0				0				0	
Through	1538	2	560	3	1541	561	117	1686	2	610	3	1689	2	611	0	1689	2	611
Through-Right		1							1				1				1	
Right	141	0	141	0	141	141	0	144	0	144	0	144	0	144	0	144	0	144
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		301	*North-South:*		301	*North-South:*			273	*North-South:*			273	*North-South:*			273
	East-West:		613	*East-West:*		617	*East-West:*			751	*East-West:*			755	*East-West:*			755
	SUM:		914	*SUM:*		918	*SUM:*			1024	*SUM:*			1028	*SUM:*			1028
VOLUME/CAPACITY *(V/C)* RATIO:			0.665			0.668				0.745				0.748				0.748
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.565**			**0.568**				**0.645**				**0.648**				**0.648**
LEVEL OF SERVICE (LOS):			A			A				B				B				B

	NB--	SB--	EB--	WB--
Right Turns: FREE-1, NRTOR-2 or OLA-3?	3	0	0	0

No. of Phases	4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	1
ATSAC-1 or ATSAC+ATCS-2?	2
Override Capacity	0

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Culver Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
5	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			4			4			4				4				4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			1			1			1				1				1	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3	SB-- 0	0	NB-- 3	SB-- 0	0	NB-- 3	SB-- 0	0		NB-- 3	SB-- 0	0		NB-- 3	SB-- 0	0	
	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	0	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
Override Capacity			0			0			0				0				0	

MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	76	1	76	0	76	76	22	100	1	100	0	100	1	100	0	100	1	100
Left-Through		0							0				0				0	
Through	47	1	47	0	47	47	0	48	1	48	0	48	1	48	0	48	1	48
Through-Right		0							0				0				0	
Right	819	2	240	0	819	240	216	1051	2	313	0	1051	2	313	0	1051	2	313
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	231	1	145	0	231	145	0	236	1	148	0	236	1	148	0	236	1	148
Left-Through		0							0				0				0	
Through	35	0	145	0	35	145	0	36	0	148	0	36	0	148	0	36	0	148
Through-Right		0							0				0				0	
Right	23	0	0	0	23	0	0	23	0	0	0	23	0	0	0	23	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	9	1	9	0	9	9	0	9	1	9	0	9	1	9	0	9	1	9
Left-Through		0							0				0				0	
Through	1202	3	401	5	1207	402	152	1378	3	459	5	1383	3	461	0	1383	3	461
Through-Right		0							0				0				0	
Right	17	1	0	0	17	0	0	17	1	0	0	17	1	0	0	17	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	381	2	210	0	381	210	93	482	2	265	0	482	2	265	0	482	2	265
Left-Through		0							0				0				0	
Through	1611	2	580	14	1625	585	162	1805	2	646	14	1819	2	650	0	1819	2	650
Through-Right		1							1				1				1	
Right	129	0	129	0	129	129	0	132	0	132	0	132	0	132	0	132	0	132
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		385	North-South:		385	North-South:		461		North-South:		461		North-South:		461	
	East-West:		611	East-West:		612	East-West:		724		East-West:		726		East-West:		726	
	SUM:		996	SUM:		997	SUM:		1185		SUM:		1187		SUM:		1187	
VOLUME/CAPACITY (V/C) RATIO:			0.724			0.725			0.862				0.863				0.863	
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.624			0.625			0.762				0.763				0.763	
LEVEL OF SERVICE (LOS):			B			B			C				C				C	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.001 | Δ*v/c* after mitigation: 0.001

Significant impacted? NO | Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
6	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	80	1	80	3	83	83	17	99	1	99	3	102	1	102	0	102	1	102
Left-Through		0							0				0				0	
Through	380	2	**190**	2	382	**191**	16	404	2	**202**	2	406	2	**203**	0	406	2	**203**
Through-Right		0							0				0				0	
Right	42	1	0	0	42	0	2	45	1	0	0	45	1	0	0	45	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	233	1	233	0	233	233	74	312	1	312	0	312	1	312	0	312	1	312
Left-Through		0							0				0				0	
Through	253	1	253	8	261	261	85	343	1	343	8	351	1	351	0	351	1	351
Through-Right		0							0				0				0	
Right	372	1	**269**	0	372	**269**	116	495	1	**379**	0	495	1	**379**	0	495	1	**379**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	375	2	**206**	0	375	**206**	39	422	2	**232**	0	422	2	**232**	0	422	2	**232**
Left-Through		0							0				0				0	
Through	1586	3	529	0	1586	529	163	1781	3	594	0	1781	3	594	0	1781	3	594
Through-Right		0							0				0				0	
Right	64	1	24	12	76	35	25	90	1	41	12	102	1	51	0	102	1	51
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	45	1	45	0	45	45	13	59	1	59	0	59	1	59	0	59	1	59
Left-Through		0							0				0				0	
Through	1421	3	**474**	0	1421	**474**	122	1572	3	**524**	0	1572	3	**524**	0	1572	3	**524**
Through-Right		0							0				0				0	
Right	187	1	71	0	187	71	32	223	1	67	0	223	1	67	0	223	1	67
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		459	*North-South:*		460	*North-South:*			581	*North-South:*			582	*North-South:*			582
	East-West:		680	*East-West:*		680	*East-West:*			756	*East-West:*			756	*East-West:*			756
	SUM:		1139	*SUM:*		1140	*SUM:*			1337	*SUM:*			1338	*SUM:*			1338
VOLUME/CAPACITY *(V/C)* RATIO:			0.828			0.829				0.972				0.973				0.973
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.728**			**0.729**				**0.872**				**0.873**				**0.873**
LEVEL OF SERVICE (LOS):			C			C				D				D				D

	NB--	SB--	EB--	WB--
Right Turns: FREE-1, NRTOR-2 or OLA-3?	3	0	0	0

No. of Phases	4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	1
ATSAC-1 or ATSAC+ATCS-2?	2
Override Capacity	0

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
6	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			4			4			4				4				4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			1			1			1				1				1	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3	SB-- 0	0	NB-- 3	SB-- 0	0	NB-- 3	SB-- 0	0		NB-- 3	SB-- 0	0		NB-- 3	SB-- 0	0	
	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	0	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
Override Capacity			0			0			0				0				0	

MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	98	1	98	14	112	112	42	142	1	142	14	156	1	156	0	156	1	156
Left-Through		0							0				0				0	
Through	349	2	**175**	9	358	**179**	50	406	2	**203**	9	415	2	**208**	0	415	2	**208**
Through-Right		0							0				0				0	
Right	63	1	1	0	63	1	8	72	1	0	0	72	1	0	0	72	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	162	1	162	0	162	162	46	211	1	211	0	211	1	211	0	211	1	211
Left-Through		0							0				0				0	
Through	164	1	164	3	167	167	59	226	1	226	3	229	1	229	0	229	1	229
Through-Right		0							0				0				0	
Right	347	1	**223**	0	347	**223**	60	414	1	**256**	0	414	1	**256**	0	414	1	**256**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	450	2	**248**	0	450	**248**	118	577	2	**317**	0	577	2	**317**	0	577	2	**317**
Left-Through		0							0				0				0	
Through	1748	3	583	0	1748	583	208	1991	3	664	0	1991	3	664	0	1991	3	664
Through-Right		0							0				0				0	
Right	98	1	49	5	103	47	42	142	1	71	5	147	1	69	0	147	1	69
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	62	1	62	0	62	62	14	77	1	77	0	77	1	77	0	77	1	77
Left-Through		0							0				0				0	
Through	1450	3	**483**	0	1450	**483**	158	1637	3	**546**	0	1637	3	**546**	0	1637	3	**546**
Through-Right		0							0				0				0	
Right	106	1	25	0	106	25	70	178	1	73	0	178	1	73	0	178	1	73
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		398	*North-South:*		402	*North-South:*			459	*North-South:*			464	*North-South:*			464
	East-West:		731	*East-West:*		731	*East-West:*			863	*East-West:*			863	*East-West:*			863
	SUM:		1129	*SUM:*		1133	*SUM:*			1322	*SUM:*			1327	*SUM:*			1327
VOLUME/CAPACITY *(V/C)* RATIO:			0.821			0.824				0.961				0.965				0.965
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.721**			**0.724**				**0.861**				**0.865**				**0.865**
LEVEL OF SERVICE (LOS):			C			C				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	National Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
7	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	238	1	**238**	0	238	**238**	75	318	1	**318**	0	318	1	**318**	0	318	1	**318**
	Left-Through		0							0				0				0	
	Through	671	1	353	2	673	355	71	755	1	402	2	757	1	404	0	757	1	404
	Through-Right		1							1				1				1	
	Right	34	0	34	2	36	36	14	49	0	49	2	51	0	51	0	51	0	51
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	95	1	95	0	95	95	0	97	1	97	0	97	1	97	0	97	1	97
	Left-Through		0							0				0				0	
	Through	590	1	**332**	10	600	**337**	121	723	1	**404**	10	733	1	**409**	0	733	1	**409**
	Through-Right		1							1				1				1	
	Right	74	0	74	0	74	74	9	84	0	84	0	84	0	84	0	84	0	84
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	121	2	67	0	121	67	18	141	2	78	0	141	2	78	0	141	2	78
	Left-Through		0							0				0				0	
	Through	1412	3	**471**	0	1412	**471**	43	1483	3	**494**	0	1483	3	**494**	0	1483	3	**494**
	Through-Right		0							0				0				0	
	Right	446	1	327	0	446	327	155	610	1	451	0	610	1	451	0	610	1	451
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	68	1	**68**	8	76	**76**	43	112	1	**112**	8	120	1	**120**	0	120	1	**120**
	Left-Through		0							0				0				0	
	Through	1265	3	422	0	1265	422	84	1374	3	458	0	1374	3	458	0	1374	3	458
	Through-Right		0							0				0				0	
	Right	73	1	26	0	73	26	2	76	1	28	0	76	1	28	0	76	1	28
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		570	*North-South:*		575	*North-South:*			722	*North-South:*			727	*North-South:*			727
		East-West:		539	*East-West:*		547	*East-West:*			606	*East-West:*			614	*East-West:*			614
		SUM:		1109	*SUM:*		1122	*SUM:*			1328	*SUM:*			1341	*SUM:*			1341
VOLUME/CAPACITY *(V/C)* RATIO:				0.807			0.816				0.966				0.975				0.975
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.707**			**0.716**				**0.866**				**0.875**				**0.875**
LEVEL OF SERVICE (LOS):				**C**			**C**				**D**				**D**				**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.009	Δ*v/c* after mitigation:	0.009
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	National Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
7	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	201	1	**201**	0	201	**201**	164	369	1	**369**	0	369	1	**369**	0	369	1	**369**
	Left-Through		0							0				0				0	
	Through	609	1	352	11	620	362	127	748	1	442	11	759	1	452	0	759	1	452
	Through-Right		1							1				1				1	
	Right	94	0	94	9	103	103	39	135	0	135	9	144	0	144	0	144	0	144
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	141	1	141	0	141	141	0	144	1	144	0	144	1	144	0	144	1	144
	Left-Through		0							0				0				0	
	Through	779	1	**418**	4	783	**420**	99	894	1	**479**	4	898	1	**481**	0	898	1	**481**
	Through-Right		1							1				1				1	
	Right	56	0	56	0	56	56	7	64	0	64	0	64	0	64	0	64	0	64
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	165	2	91	0	165	91	33	201	2	111	0	201	2	111	0	201	2	111
	Left-Through		0							0				0				0	
	Through	1554	3	**518**	0	1554	**518**	90	1675	3	**558**	0	1675	3	**558**	0	1675	3	**558**
	Through-Right		0							0				0				0	
	Right	310	1	210	0	310	210	141	457	1	273	0	457	1	273	0	457	1	273
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	90	1	**90**	3	93	**93**	41	133	1	**133**	3	136	1	**136**	0	136	1	**136**
	Left-Through		0							0				0				0	
	Through	1337	3	446	0	1337	446	84	1448	3	483	0	1448	3	483	0	1448	3	483
	Through-Right		0							0				0				0	
	Right	59	1	0	0	59	0	4	64	1	0	0	64	1	0	0	64	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		619	*North-South:*		621	*North-South:*			848	*North-South:*			850	*North-South:*			850
		East-West:		608	*East-West:*		611	*East-West:*			691	*East-West:*			694	*East-West:*			694
		SUM:		1227	*SUM:*		1232	*SUM:*			1539	*SUM:*			1544	*SUM:*			1544
VOLUME/CAPACITY *(V/C)* RATIO:				0.892			0.896				1.119				1.123				1.123
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.792**			**0.796**				**1.019**				**1.023**				**1.023**
LEVEL OF SERVICE (LOS):				C			C				F				F				F

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	La Cienega Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
8	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	172	1	172	0	172	172	0	175	1	175	0	175	1	175	0	175	1	175
Left-Through		0							0				0				0	
Through	1633	2	**563**	1	1634	**564**	61	1727	2	**596**	1	1728	2	**597**	0	1728	2	**597**
Through-Right		1							1				1				1	
Right	57	0	57	0	57	57	4	62	0	62	0	62	0	62	0	62	0	62
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	118	1	**118**	0	118	**118**	0	120	1	**120**	0	120	1	**120**	0	120	1	**120**
Left-Through		0							0				0				0	
Through	1160	2	467	2	1162	468	87	1270	2	519	2	1272	2	520	0	1272	2	520
Through-Right		1							1				1				1	
Right	242	0	242	0	242	242	41	288	0	288	0	288	0	288	0	288	0	288
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	274	2	151	0	274	151	22	302	2	**166**	0	302	2	**166**	0	302	2	**166**
Left-Through		0							0				0				0	
Through	1187	3	**396**	2	1189	**396**	33	1244	3	415	2	1246	3	415	0	1246	3	415
Through-Right		0							0				0				0	
Right	127	1	41	0	127	41	0	130	1	43	0	130	1	43	0	130	1	43
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	179	1	**179**	0	179	**179**	11	194	1	194	0	194	1	194	0	194	1	194
Left-Through		0							0				0				0	
Through	1234	3	411	8	1242	414	72	1331	3	**444**	8	1339	3	**446**	0	1339	3	**446**
Through-Right		0							0				0				0	
Right	85	1	26	0	85	26	0	87	1	27	0	87	1	27	0	87	1	27
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		681	*North-South:*		682	*North-South:*			716	*North-South:*			717	*North-South:*			717
	East-West:		575	*East-West:*		575	*East-West:*			610	*East-West:*			612	*East-West:*			612
	SUM:		1256	*SUM:*		1257	*SUM:*			1326	*SUM:*			1329	*SUM:*			1329
VOLUME/CAPACITY *(V/C)* RATIO:			0.913			0.914				0.964				0.967				0.967
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.813**			**0.814**				**0.864**				**0.867**				**0.867**
LEVEL OF SERVICE (LOS):			D			D				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	La Cienega Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
8	East-West Street:	Venice Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4					4
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	91	1	**91**	0	91	**91**	0	93	1	**93**	0	93	1	**93**	0	93	1	**93**
	Left-Through		0							0				0				0	
	Through	961	2	345	3	964	346	84	1064	2	384	3	1067	2	385	0	1067	2	385
	Through-Right		1							1				1				1	
	Right	75	0	75	0	75	75	12	89	0	89	0	89	0	89	0	89	0	89
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	60	1	60	0	60	60	0	61	1	61	0	61	1	61	0	61	1	61
	Left-Through		0							0				0				0	
	Through	1389	2	**529**	1	1390	**530**	75	1492	2	**575**	1	1493	2	**576**	0	1493	2	**576**
	Through-Right		1							1				1				1	
	Right	199	0	199	0	199	199	31	234	0	234	0	234	0	234	0	234	0	234
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	286	2	157	0	286	157	47	339	2	186	0	339	2	186	0	339	2	186
	Left-Through		0							0				0				0	
	Through	1396	3	**465**	9	1405	**468**	82	1506	3	**502**	9	1515	3	**505**	0	1515	3	**505**
	Through-Right		0							0				0				0	
	Right	152	1	107	0	152	107	0	155	1	109	0	155	1	109	0	155	1	109
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	172	1	**172**	0	172	**172**	5	180	1	**180**	0	180	1	**180**	0	180	1	**180**
	Left-Through		0							0				0				0	
	Through	1091	3	364	3	1094	365	69	1182	3	394	3	1185	3	395	0	1185	3	395
	Through-Right		0							0				0				0	
	Right	29	1	0	0	29	0	0	30	1	0	0	30	1	0	0	30	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		620	*North-South:*		621	*North-South:*		668		*North-South:*		669		*North-South:*			669
		East-West:		637	*East-West:*		640	*East-West:*		682		*East-West:*		685		*East-West:*			685
		SUM:		1257	*SUM:*		1261	*SUM:*		1350		*SUM:*		1354		*SUM:*			1354
	VOLUME/CAPACITY *(V/C)* RATIO:			0.914			0.917			0.982				0.985					0.985
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.814**			**0.817**			**0.882**				**0.885**					**0.885**
	LEVEL OF SERVICE (LOS):			**D**			**D**			**D**				**D**					**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.003 **Δ*v/c* after mitigation:** 0.003

Significant impacted? NO **Fully mitigated?** N/A

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 9
North/South Street: **WASHINGTON BOULEVARD-IRVING PLACE**
East/West Street: **CULVER BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.09	27	137	0.197	N-S(1):	0.288 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.91	603	2,757	0.219 *	E-W(1):	0.268
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.338 *
	TH	3.00	1,623	4,800	0.338 *		
	LT	1.00	43	1,600	0.027	V/C:	0.626
Northbound	RT	1.00	87	1,600	0.028	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	110	1,600	0.069 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.656
	TH	3.00	1,159	4,800	0.241		
	LT	0.00	0	0	0.000 *	LOS:	B

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.04	18	62	0.290	N-S(1):	0.344 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.96	911	2,824	0.323 *	E-W(1):	0.274 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.269
	TH	3.00	1,293	4,800	0.269		
	LT	1.00	33	1,600	0.021 *	V/C:	0.618
Northbound	RT	1.00	61	1,600	0.018	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	34	1,600	0.021 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.648
	TH	3.00	1,214	4,800	0.253 *		
	LT	0.00	0	0	0.000	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 9
North/South Street: WASHINGTON BOULEVARD-IRVING PLACE
East/West Street: CULVER BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.09	27	137	0.197	N-S(1):	0.288 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.91	603	2,757	0.219 *	E-W(1):	0.271
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.339 *
	TH	3.00	1,625	4,800	0.339 *		
	LT	1.00	43	1,600	0.027	V/C:	0.627
Northbound	RT	1.00	87	1,600	0.028	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	110	1,600	0.069 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.657
	TH	3.00	1,170	4,800	0.244		
	LT	0.00	0	0	0.000 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.04	18	62	0.290	N-S(1):	0.344 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.96	911	2,824	0.323 *	E-W(1):	0.275 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.272
	TH	3.00	1,305	4,800	0.272		
	LT	1.00	33	1,600	0.021 *	V/C:	0.619
Northbound	RT	1.00	61	1,600	0.018	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	34	1,600	0.021 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.649
	TH	3.00	1,218	4,800	0.254 *		
	LT	0.00	0	0	0.000	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 9
North/South Street: WASHINGTON BOULEVARD-IRVING PLACE
East/West Street: CULVER BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.09	28	138	0.203	N-S(1):	0.296 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.91	623	2,756	0.226 *	E-W(1):	0.323
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.390 *
	TH	3.00	1,870	4,800	0.390 *		
	LT	1.00	44	1,600	0.028	V/C:	0.686
Northbound	RT	1.00	91	1,600	0.029	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	112	1,600	0.070 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.716
	TH	3.00	1,416	4,800	0.295		
	LT	0.00	0	0	0.000 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.04	18	60	0.300	N-S(1):	0.356 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.96	943	2,826	0.334 *	E-W(1):	0.327
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.328 *
	TH	3.00	1,574	4,800	0.328 *		
	LT	1.00	34	1,600	0.021	V/C:	0.684
Northbound	RT	1.00	65	1,600	0.019	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	35	1,600	0.022 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.714
	TH	3.00	1,471	4,800	0.306		
	LT	0.00	0	0	0.000 *	LOS:	C

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 9
North/South Street: **WASHINGTON BOULEVARD-IRVING PLACE**
East/West Street: **CULVER BOULEVARD**

Scenario: **CUMULATIVE (2018) PLUS PROJECT CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.09	28	138	0.203	N-S(1):	0.296 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.91	623	2,756	0.226 *	E-W(1):	0.325
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.390 *
	TH	3.00	1,872	4,800	0.390 *		
	LT	1.00	44	1,600	0.028	V/C:	0.686
Northbound	RT	1.00	91	1,600	0.029	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	112	1,600	0.070 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.716
	TH	3.00	1,427	4,800	0.297		
	LT	0.00	0	0	0.000 *	LOS:	C

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.04	18	60	0.300	N-S(1):	0.356 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.96	943	2,826	0.334 *	E-W(1):	0.328
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.330 *
	TH	3.00	1,586	4,800	0.330 *		
	LT	1.00	34	1,600	0.021	V/C:	0.686
Northbound	RT	1.00	65	1,600	0.019	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	35	1,600	0.022 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.716
	TH	3.00	1,475	4,800	0.307		
	LT	0.00	0	0	0.000 *	LOS:	C

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 10
North/South Street: MAIN STREET
East/West Street: CULVER BOULEVARD

Scenario: EXISTING (2016) CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	212	1,600	0.000	N-S(1):	0.056 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	89	1,600	0.056 *	E-W(1):	0.337
Westbound	RT	1.00	126	1,600	0.023	E-W(2):	0.598 *
	TH	2.00	1,394	3,200	0.436 *		
	LT	0.00	0	0	0.000	V/C:	0.654
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.684
	TH	3.00	1,619	4,800	0.337		
	LT	1.00	259	1,600	0.162 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	209	1,600	0.043	N-S(1):	0.143 *
	TH	0.00	0	0	0.000	N-S(2):	0.043
	LT	1.00	229	1,600	0.143 *	E-W(1):	0.375
Westbound	RT	1.00	92	1,600	0.000	E-W(2):	0.429 *
	TH	2.00	1,091	3,200	0.341 *		
	LT	0.00	1	1,600	0.001	V/C:	0.572
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.602
	TH	3.00	1,795	4,800	0.374		
	LT	1.00	141	1,600	0.088 *	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 10
North/South Street: MAIN STREET
East/West Street: CULVER BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	212	1,600	0.000	N-S(1):	0.056 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	89	1,600	0.056 *	E-W(1):	0.340
Westbound	RT	1.00	126	1,600	0.023	E-W(2):	0.598 *
	TH	2.00	1,396	3,200	0.436 *		
	LT	0.00	0	0	0.000	V/C:	0.654
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.684
	TH	3.00	1,630	4,800	0.340		
	LT	1.00	259	1,600	0.162 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	209	1,600	0.043	N-S(1):	0.143 *
	TH	0.00	0	0	0.000	N-S(2):	0.043
	LT	1.00	229	1,600	0.143 *	E-W(1):	0.376
Westbound	RT	1.00	92	1,600	0.000	E-W(2):	0.433 *
	TH	2.00	1,103	3,200	0.345 *		
	LT	0.00	1	1,600	0.001	V/C:	0.576
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.606
	TH	3.00	1,799	4,800	0.375		
	LT	1.00	141	1,600	0.088 *	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 10
North/South Street: **MAIN STREET**
East/West Street: **CULVER BOULEVARD**

Scenario: **CUMULATIVE (2018) BASE CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	216	1,600	0.000	N-S(1):	0.080 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	128	1,600	0.080 *	E-W(1):	0.395
Westbound	RT	1.00	132	1,600	0.003	E-W(2):	0.676 *
	TH	2.00	1,636	3,200	0.511 *		
	LT	0.00	0	0	0.000	V/C:	0.756
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.786
	TH	3.00	1,895	4,800	0.395		
	LT	1.00	264	1,600	0.165 *	LOS:	C

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	213	1,600	0.043	N-S(1):	0.168 *
	TH	0.00	0	0	0.000	N-S(2):	0.043
	LT	1.00	269	1,600	0.168 *	E-W(1):	0.435
Westbound	RT	1.00	106	1,600	0.000	E-W(2):	0.518 *
	TH	2.00	1,368	3,200	0.428 *		
	LT	0.00	1	1,600	0.001	V/C:	0.686
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.716
	TH	3.00	2,081	4,800	0.434		
	LT	1.00	144	1,600	0.090 *	LOS:	C

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 10
North/South Street: MAIN STREET
East/West Street: CULVER BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	216	1,600	0.000	N-S(1):	0.080 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	128	1,600	0.080 *	E-W(1):	0.397
Westbound	RT	1.00	132	1,600	0.003	E-W(2):	0.677 *
	TH	2.00	1,638	3,200	0.512 *		
	LT	0.00	0	0	0.000	V/C:	0.757
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.787
	TH	3.00	1,906	4,800	0.397		
	LT	1.00	264	1,600	0.165 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	213	1,600	0.043	N-S(1):	0.168 *
	TH	0.00	0	0	0.000	N-S(2):	0.043
	LT	1.00	269	1,600	0.168 *	E-W(1):	0.435
Westbound	RT	1.00	106	1,600	0.000	E-W(2):	0.522 *
	TH	2.00	1,380	3,200	0.432 *		
	LT	0.00	1	1,600	0.001	V/C:	0.690
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.720
	TH	3.00	2,085	4,800	0.434		
	LT	1.00	144	1,600	0.090 *	LOS:	C

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 11
North/South Street: WASHINGTON BOULEVARD-CANFIELD AVENUE
East/West Street: CULVER BOULEVARD

Scenario: EXISTING (2016) CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	8	1,600	0.001 *	N-S(1):	0.385
	TH	0.00	0	0	0.000	N-S(2):	0.428 *
	LT	0.00	0	0	0.000	E-W(1):	0.239 *
Westbound	RT	0.00	1	0	0.000	E-W(2):	0.090
	TH	2.00	273	3,200	0.086		
	LT	1.00	30	1,600	0.019 *	V/C:	0.667
Northbound	RT	1.00	53	1,600	0.014	Lost Time:	0.100
	TH	0.03	17	44	0.385	ATSAC:	-0.070
	LT	1.97	1,214	2,840	0.427 *		
Eastbound	RT	2.00	1,046	3,200	0.135	ICU:	0.697
	TH	2.00	705	3,200	0.220 *		
	LT	1.00	7	1,600	0.004	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	25	1,600	0.001 *	N-S(1):	0.286
	TH	0.00	0	0	0.000	N-S(2):	0.319 *
	LT	0.00	0	0	0.000	E-W(1):	0.273 *
Westbound	RT	0.00	19	0	0.000	E-W(2):	0.127
	TH	2.00	344	3,200	0.113		
	LT	1.00	35	1,600	0.022 *	V/C:	0.592
Northbound	RT	1.00	99	1,600	0.040	Lost Time:	0.100
	TH	0.03	14	49	0.286	ATSAC:	-0.070
	LT	1.97	901	2,836	0.318 *		
Eastbound	RT	2.00	1,219	3,200	0.238	ICU:	0.622
	TH	2.00	804	3,200	0.251 *		
	LT	1.00	23	1,600	0.014	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 11
North/South Street: WASHINGTON BOULEVARD-CANFIELD AVENUE
East/West Street: CULVER BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	8	1,600	0.001 *	N-S(1):	0.385
	TH	0.00	0	0	0.000	N-S(2):	0.429 *
	LT	0.00	0	0	0.000	E-W(1):	0.239 *
Westbound	RT	0.00	1	0	0.000	E-W(2):	0.090
	TH	2.00	273	3,200	0.086		
	LT	1.00	30	1,600	0.019 *	V/C:	0.668
Northbound	RT	1.00	53	1,600	0.014	Lost Time:	0.100
	TH	0.03	17	44	0.385	ATSAC:	-0.070
	LT	1.97	1,216	2,840	0.428 *		
Eastbound	RT	2.00	1,057	3,200	0.138	ICU:	0.698
	TH	2.00	705	3,200	0.220 *		
	LT	1.00	7	1,600	0.004	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	25	1,600	0.001 *	N-S(1):	0.290
	TH	0.00	0	0	0.000	N-S(2):	0.323 *
	LT	0.00	0	0	0.000	E-W(1):	0.273 *
Westbound	RT	0.00	19	0	0.000	E-W(2):	0.127
	TH	2.00	344	3,200	0.113		
	LT	1.00	35	1,600	0.022 *	V/C:	0.596
Northbound	RT	1.00	99	1,600	0.040	Lost Time:	0.100
	TH	0.03	14	48	0.290	ATSAC:	-0.070
	LT	1.97	913	2,837	0.322 *		
Eastbound	RT	2.00	1,223	3,200	0.237	ICU:	0.626
	TH	2.00	804	3,200	0.251 *		
	LT	1.00	23	1,600	0.014	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 11
North/South Street: WASHINGTON BOULEVARD-CANFIELD AVENUE
East/West Street: CULVER BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	8	1,600	0.001 *	N-S(1):	0.429
	TH	0.00	0	0	0.000	N-S(2):	0.478 *
	LT	0.00	0	0	0.000	E-W(1):	0.293 *
Westbound	RT	0.00	1	0	0.000	E-W(2):	0.123
	TH	2.00	379	3,200	0.119		
	LT	1.00	68	1,600	0.043 *	V/C:	0.771
Northbound	RT	1.00	57	1,600	0.000	Lost Time:	0.100
	TH	0.02	17	40	0.429	ATSAC:	-0.070
	LT	1.98	1,357	2,844	0.477 *		
Eastbound	RT	2.00	1,264	3,200	0.180	ICU:	0.801
	TH	2.00	801	3,200	0.250 *		
	LT	1.00	7	1,600	0.004	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	26	1,600	0.002 *	N-S(1):	0.352
	TH	0.00	0	0	0.000	N-S(2):	0.393 *
	LT	0.00	0	0	0.000	E-W(1):	0.332 *
Westbound	RT	0.00	19	0	0.000	E-W(2):	0.152
	TH	2.00	424	3,200	0.138		
	LT	1.00	61	1,600	0.038 *	V/C:	0.725
Northbound	RT	1.00	120	1,600	0.037	Lost Time:	0.100
	TH	0.02	14	40	0.352	ATSAC:	-0.070
	LT	1.98	1,113	2,844	0.391 *		
Eastbound	RT	2.00	1,408	3,200	0.264	ICU:	0.755
	TH	2.00	940	3,200	0.294 *		
	LT	1.00	23	1,600	0.014	LOS:	C

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 11
North/South Street: WASHINGTON BOULEVARD-CANFIELD AVENUE
East/West Street: CULVER BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	8	1,600	0.001 *	N-S(1):	0.430
	TH	0.00	0	0	0.000	N-S(2):	0.479 *
	LT	0.00	0	0	0.000	E-W(1):	0.293 *
Westbound	RT	0.00	1	0	0.000	E-W(2):	0.123
	TH	2.00	379	3,200	0.119		
	LT	1.00	68	1,600	0.043 *	V/C:	0.772
Northbound	RT	1.00	57	1,600	0.000	Lost Time:	0.100
	TH	0.02	17	40	0.430	ATSAC:	-0.070
	LT	1.98	1,359	2,844	0.478 *		
Eastbound	RT	2.00	1,275	3,200	0.183	ICU:	0.802
	TH	2.00	801	3,200	0.250 *		
	LT	1.00	7	1,600	0.004	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	26	1,600	0.002 *	N-S(1):	0.356
	TH	0.00	0	0	0.000	N-S(2):	0.397 *
	LT	0.00	0	0	0.000	E-W(1):	0.332 *
Westbound	RT	0.00	19	0	0.000	E-W(2):	0.152
	TH	2.00	424	3,200	0.138		
	LT	1.00	61	1,600	0.038 *	V/C:	0.729
Northbound	RT	1.00	120	1,600	0.037	Lost Time:	0.100
	TH	0.02	14	39	0.356	ATSAC:	-0.070
	LT	1.98	1,125	2,845	0.395 *		
Eastbound	RT	2.00	1,412	3,200	0.263	ICU:	0.759
	TH	2.00	940	3,200	0.294 *		
	LT	1.00	23	1,600	0.014	LOS:	C

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 12
North/South Street: **INCE BOULEVARD**
East/West Street: **WASHINGTON BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	5	1,600	0.003	N-S(1):	0.451 *
	TH	0.17	88	280	0.315	N-S(2):	0.000
	LT	1.83	919	2,628	0.350 *	E-W(1):	0.377 *
Westbound	RT	2.00	1,197	3,200	0.374 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	58	1,600	0.036	V/C:	0.828
Northbound	RT	1.00	111	1,600	0.033	Lost Time:	0.100
	TH	1.00	162	1,600	0.101 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	0.858
	TH	1.00	3	1,600	0.003 *		
	LT	0.00	0	0	0.000	LOS:	D

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	5	1,600	0.003	N-S(1):	0.514 *
	TH	0.13	86	208	0.414	N-S(2):	0.000
	LT	1.87	1,238	2,693	0.460 *	E-W(1):	0.269 *
Westbound	RT	2.00	838	3,200	0.262 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	94	1,600	0.059	V/C:	0.783
Northbound	RT	1.00	78	1,600	0.000	Lost Time:	0.100
	TH	1.00	87	1,600	0.054 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	0.813
	TH	1.00	10	1,600	0.007 *		
	LT	0.00	0	0	0.000	LOS:	D

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 12
North/South Street: INCE BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	5	1,600	0.003	N-S(1):	0.454 *
	TH	0.17	88	277	0.318	N-S(2):	0.000
	LT	1.83	930	2,631	0.353 *	E-W(1):	0.378 *
Westbound	RT	2.00	1,199	3,200	0.375 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	58	1,600	0.036	V/C:	0.832
Northbound	RT	1.00	111	1,600	0.033	Lost Time:	0.100
	TH	1.00	162	1,600	0.101 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	0.862
	TH	1.00	3	1,600	0.003 *		
	LT	0.00	0	0	0.000	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	5	1,600	0.003	N-S(1):	0.515 *
	TH	0.13	86	207	0.415	N-S(2):	0.000
	LT	1.87	1,242	2,693	0.461 *	E-W(1):	0.273 *
Westbound	RT	2.00	850	3,200	0.266 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	94	1,600	0.059	V/C:	0.788
Northbound	RT	1.00	78	1,600	0.000	Lost Time:	0.100
	TH	1.00	87	1,600	0.054 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	0.818
	TH	1.00	10	1,600	0.007 *		
	LT	0.00	0	0	0.000	LOS:	D

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 12
North/South Street: INCE BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	60	1,600	0.038	N-S(1):	0.542 *
	TH	0.29	179	463	0.387	N-S(2):	0.000
	LT	1.71	1,058	2,463	0.430 *	E-W(1):	0.442 *
Westbound	RT	2.00	1,327	3,200	0.415 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	119	1,600	0.074	V/C:	0.984
Northbound	RT	1.00	117	1,600	0.000	Lost Time:	0.100
	TH	1.00	179	1,600	0.112 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	1.014
	TH	1.00	42	1,600	0.027 *		
	LT	0.00	0	0	0.000	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	69	1,600	0.043	N-S(1):	0.627 *
	TH	0.15	115	244	0.471	N-S(2):	0.000
	LT	1.85	1,391	2,660	0.523 *	E-W(1):	0.371 *
Westbound	RT	2.00	991	3,200	0.310 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	114	1,600	0.071	V/C:	0.998
Northbound	RT	1.00	103	1,600	0.000	Lost Time:	0.100
	TH	1.00	166	1,600	0.104 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	1.028
	TH	1.00	96	1,600	0.061 *		
	LT	0.00	0	0	0.000	LOS:	F

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 12
North/South Street: INCE BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	60	1,600	0.038	N-S(1):	0.545 *
	TH	0.29	179	459	0.390	N-S(2):	0.000
	LT	1.71	1,069	2,467	0.433 *	E-W(1):	0.442 *
Westbound	RT	2.00	1,329	3,200	0.415 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	119	1,600	0.074	V/C:	0.987
Northbound	RT	1.00	117	1,600	0.000	Lost Time:	0.100
	TH	1.00	179	1,600	0.112 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	1.017
	TH	1.00	42	1,600	0.027 *		
	LT	0.00	0	0	0.000	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	69	1,600	0.043	N-S(1):	0.628 *
	TH	0.15	115	244	0.472	N-S(2):	0.000
	LT	1.85	1,395	2,661	0.524 *	E-W(1):	0.374 *
Westbound	RT	2.00	1,003	3,200	0.313 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	114	1,600	0.071	V/C:	1.002
Northbound	RT	1.00	103	1,600	0.000	Lost Time:	0.100
	TH	1.00	166	1,600	0.104 *	ATSAC:	-0.070
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	1	0	0.000	ICU:	1.032
	TH	1.00	96	1,600	0.061 *		
	LT	0.00	0	0	0.000	LOS:	F

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 13
North/South Street: **ROBERTSON BOULEVARD-HIGUERA STREET**
East/West Street: **WASHINGTON BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	86	1,600	0.054	N-S(1):	0.284 *
	TH	1.00	238	1,600	0.149	N-S(2):	0.203
	LT	1.00	101	1,600	0.063 *	E-W(1):	0.270
Westbound	RT	0.00	142	0	0.000	E-W(2):	0.396 *
	TH	2.00	1,041	3,200	0.370 *		
	LT	1.00	78	1,600	0.049	V/C:	0.680
Northbound	RT	1.00	124	1,600	0.029	Lost Time:	0.100
	TH	1.00	354	1,600	0.221 *	ATSAC:	-0.070
	LT	1.00	86	1,600	0.054		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.710
	TH	2.00	642	3,200	0.221		
	LT	1.00	42	1,600	0.026 *	LOS:	C

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	72	1,600	0.045	N-S(1):	0.224 *
	TH	1.00	235	1,600	0.147	N-S(2):	0.170
	LT	1.00	124	1,600	0.078 *	E-W(1):	0.395 *
Westbound	RT	0.00	202	0	0.000	E-W(2):	0.388
	TH	2.00	651	3,200	0.267		
	LT	1.00	82	1,600	0.051 *	V/C:	0.619
Northbound	RT	1.00	88	1,600	0.004	Lost Time:	0.100
	TH	1.00	234	1,600	0.146 *	ATSAC:	-0.070
	LT	1.00	36	1,600	0.023		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.649
	TH	2.00	1,028	3,200	0.344 *		
	LT	1.00	193	1,600	0.121	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 13
North/South Street: ROBERTSON BOULEVARD-HIGUERA STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	86	1,600	0.054	N-S(1):	0.297 *
	TH	1.00	238	1,600	0.149	N-S(2):	0.203
	LT	1.00	122	1,600	0.076 *	E-W(1):	0.273
Westbound	RT	0.00	147	0	0.000	E-W(2):	0.398 *
	TH	2.00	1,043	3,200	0.372 *		
	LT	1.00	78	1,600	0.049	V/C:	0.695
Northbound	RT	1.00	126	1,600	0.030	Lost Time:	0.100
	TH	1.00	354	1,600	0.221 *	ATSAC:	-0.070
	LT	1.00	86	1,600	0.054		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.725
	TH	2.00	653	3,200	0.224		
	LT	1.00	42	1,600	0.026 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	72	1,600	0.045	N-S(1):	0.229 *
	TH	1.00	235	1,600	0.147	N-S(2):	0.170
	LT	1.00	132	1,600	0.083 *	E-W(1):	0.398
Westbound	RT	0.00	225	0	0.000	E-W(2):	0.399 *
	TH	2.00	663	3,200	0.278 *		
	LT	1.00	84	1,600	0.053	V/C:	0.628
Northbound	RT	1.00	89	1,600	0.003	Lost Time:	0.100
	TH	1.00	234	1,600	0.146 *	ATSAC:	-0.070
	LT	1.00	36	1,600	0.023		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.658
	TH	2.00	1,032	3,200	0.345		
	LT	1.00	193	1,600	0.121 *	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 13
North/South Street: **ROBERTSON BOULEVARD-HIGUERA STREET**
East/West Street: **WASHINGTON BOULEVARD**

Scenario: **CUMULATIVE (2018) BASE CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	153	1,600	0.096	N-S(1):	0.323 *
	TH	1.00	268	1,600	0.168	N-S(2):	0.226
	LT	1.00	136	1,600	0.085 *	E-W(1):	0.317
Westbound	RT	0.00	154	0	0.000	E-W(2):	0.463 *
	TH	2.00	1,227	3,200	0.432 *		
	LT	1.00	81	1,600	0.051	V/C:	0.786
Northbound	RT	1.00	128	1,600	0.029	Lost Time:	0.100
	TH	1.00	380	1,600	0.238 *	ATSAC:	-0.070
	LT	1.00	92	1,600	0.058		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.816
	TH	2.00	777	3,200	0.266		
	LT	1.00	49	1,600	0.031 *	LOS:	D

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	125	1,600	0.078	N-S(1):	0.269 *
	TH	1.00	260	1,600	0.163	N-S(2):	0.189
	LT	1.00	170	1,600	0.106 *	E-W(1):	0.458
Westbound	RT	0.00	249	0	0.000	E-W(2):	0.486 *
	TH	2.00	840	3,200	0.340 *		
	LT	1.00	87	1,600	0.054	V/C:	0.755
Northbound	RT	1.00	94	1,600	0.004	Lost Time:	0.100
	TH	1.00	260	1,600	0.163 *	ATSAC:	-0.070
	LT	1.00	41	1,600	0.026		
Eastbound	RT	0.00	87	0	0.000	ICU:	0.785
	TH	2.00	1,207	3,200	0.404		
	LT	1.00	233	1,600	0.146 *	LOS:	C

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 13
North/South Street: ROBERTSON BOULEVARD-HIGUERA STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	153	1,600	0.096	N-S(1):	0.336 *
	TH	1.00	268	1,600	0.168	N-S(2):	0.226
	LT	1.00	157	1,600	0.098 *	E-W(1):	0.320
Westbound	RT	0.00	159	0	0.000	E-W(2):	0.465 *
	TH	2.00	1,229	3,200	0.434 *		
	LT	1.00	81	1,600	0.051	V/C:	0.801
Northbound	RT	1.00	130	1,600	0.031	Lost Time:	0.100
	TH	1.00	380	1,600	0.238 *	ATSAC:	-0.070
	LT	1.00	92	1,600	0.058		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.831
	TH	2.00	788	3,200	0.269		
	LT	1.00	49	1,600	0.031 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	125	1,600	0.078	N-S(1):	0.274 *
	TH	1.00	260	1,600	0.163	N-S(2):	0.189
	LT	1.00	178	1,600	0.111 *	E-W(1):	0.462
Westbound	RT	0.00	272	0	0.000	E-W(2):	0.497 *
	TH	2.00	852	3,200	0.351 *		
	LT	1.00	89	1,600	0.056	V/C:	0.771
Northbound	RT	1.00	95	1,600	0.004	Lost Time:	0.100
	TH	1.00	260	1,600	0.163 *	ATSAC:	-0.070
	LT	1.00	41	1,600	0.026		
Eastbound	RT	0.00	87	0	0.000	ICU:	0.801
	TH	2.00	1,211	3,200	0.406		
	LT	1.00	233	1,600	0.146 *	LOS:	D

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 14
North/South Street: **LANDMARK STREET**
East/West Street: **WASHINGTON BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.034 *
	LT	0.00	0	0	0.000	E-W(1):	0.319
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.378 *
	TH	2.00	1,211	3,200	0.378 *		
	LT	1.00	63	1,600	0.039	V/C:	0.412
Northbound	RT	1.00	47	1,600	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	54	1,600	0.034 *		
Eastbound	RT	0.00	93	0	0.000	ICU:	0.442
	TH	2.00	804	3,200	0.280		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.017 *
	TH	0.00	0	0	0.000	N-S(2):	0.014
	LT	0.00	0	0	0.000 *	E-W(1):	0.397 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.292
	TH	2.00	935	3,200	0.292		
	LT	1.00	6	1,600	0.004 *	V/C:	0.414
Northbound	RT	1.00	33	1,600	0.017 *	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	23	1,600	0.014		
Eastbound	RT	0.00	6	0	0.000	ICU:	0.444
	TH	2.00	1,250	3,200	0.393 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 14
North/South Street: LANDMARK STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.034 *
	LT	0.00	0	0	0.000	E-W(1):	0.323
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.394 *
	TH	2.00	1,260	3,200	0.394 *		
	LT	1.00	63	1,600	0.039	V/C:	0.428
Northbound	RT	1.00	47	1,600	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	54	1,600	0.034 *		
Eastbound	RT	0.00	93	0	0.000	ICU:	0.458
	TH	2.00	815	3,200	0.284		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.017 *
	TH	0.00	0	0	0.000	N-S(2):	0.014
	LT	0.00	0	0	0.000 *	E-W(1):	0.414 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.298
	TH	2.00	955	3,200	0.298		
	LT	1.00	6	1,600	0.004 *	V/C:	0.431
Northbound	RT	1.00	33	1,600	0.017 *	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	23	1,600	0.014		
Eastbound	RT	0.00	6	0	0.000	ICU:	0.461
	TH	2.00	1,305	3,200	0.410 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 14
North/South Street: LANDMARK STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.039 *
	LT	0.00	0	0	0.000	E-W(1):	0.402
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.438 *
	TH	2.00	1,401	3,200	0.438 *		
	LT	1.00	107	1,600	0.067	V/C:	0.477
Northbound	RT	1.00	60	1,600	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	63	1,600	0.039 *		
Eastbound	RT	0.00	123	0	0.000	ICU:	0.507
	TH	2.00	950	3,200	0.335		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.018
	TH	0.00	0	0	0.000 *	N-S(2):	0.039 *
	LT	0.00	0	0	0.000	E-W(1):	0.505 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.355
	TH	2.00	1,136	3,200	0.355		
	LT	1.00	66	1,600	0.041 *	V/C:	0.544
Northbound	RT	1.00	94	1,600	0.018	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	63	1,600	0.039 *		
Eastbound	RT	0.00	46	0	0.000	ICU:	0.574
	TH	2.00	1,440	3,200	0.464 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 14
North/South Street: LANDMARK STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.039 *
	LT	0.00	0	0	0.000	E-W(1):	0.406
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.453 *
	TH	2.00	1,450	3,200	0.453 *		
	LT	1.00	107	1,600	0.067	V/C:	0.492
Northbound	RT	1.00	60	1,600	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	63	1,600	0.039 *		
Eastbound	RT	0.00	123	0	0.000	ICU:	0.522
	TH	2.00	961	3,200	0.339		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.018
	TH	0.00	0	0	0.000 *	N-S(2):	0.039 *
	LT	0.00	0	0	0.000	E-W(1):	0.523 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.361
	TH	2.00	1,156	3,200	0.361		
	LT	1.00	66	1,600	0.041 *	V/C:	0.562
Northbound	RT	1.00	94	1,600	0.018	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.00	63	1,600	0.039 *		
Eastbound	RT	0.00	46	0	0.000	ICU:	0.592
	TH	2.00	1,495	3,200	0.482 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 15
North/South Street: **NATIONAL BOULEVARD**
East/West Street: **WASHINGTON BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.268
	TH	2.00	684	3,200	0.239 *	N-S(2):	0.312 *
	LT	2.00	82	2,880	0.028	E-W(1):	0.286
Westbound	RT	0.00	181	0	0.000	E-W(2):	0.328 *
	TH	3.00	1,213	4,800	0.290 *		
	LT	1.00	162	1,600	0.101	V/C:	0.640
Northbound	RT	0.00	36	0	0.000	Lost Time:	0.100
	TH	2.00	733	3,200	0.240	ATSAC:	-0.070
	LT	2.00	211	2,880	0.073 *		
Eastbound	RT	1.00	140	1,600	0.022	ICU:	0.670
	TH	2.00	592	3,200	0.185		
	LT	1.00	61	1,600	0.038 *	LOS:	B

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	52	0	0.000	N-S(1):	0.339
	TH	2.00	937	3,200	0.309 *	N-S(2):	0.382 *
	LT	2.00	240	2,880	0.083	E-W(1):	0.404 *
Westbound	RT	0.00	104	0	0.000	E-W(2):	0.238
	TH	3.00	783	4,800	0.185		
	LT	1.00	126	1,600	0.079 *	V/C:	0.786
Northbound	RT	0.00	80	0	0.000	Lost Time:	0.100
	TH	2.00	740	3,200	0.256	ATSAC:	-0.070
	LT	2.00	209	2,880	0.073 *		
Eastbound	RT	1.00	200	1,600	0.060	ICU:	0.816
	TH	2.00	1,039	3,200	0.325 *		
	LT	1.00	85	1,600	0.053	LOS:	D

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 15
North/South Street: NATIONAL BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	100	0	0.000	N-S(1):	0.268
	TH	2.00	684	3,200	0.245 *	N-S(2):	0.324 *
	LT	2.00	82	2,880	0.028	E-W(1):	0.287
Westbound	RT	0.00	181	0	0.000	E-W(2):	0.335 *
	TH	3.00	1,228	4,800	0.294 *		
	LT	1.00	162	1,600	0.101	V/C:	0.659
Northbound	RT	0.00	36	0	0.000	Lost Time:	0.100
	TH	2.00	733	3,200	0.240	ATSAC:	-0.070
	LT	2.00	227	2,880	0.079 *		
Eastbound	RT	1.00	144	1,600	0.019	ICU:	0.689
	TH	2.00	595	3,200	0.186		
	LT	1.00	65	1,600	0.041 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	59	0	0.000	N-S(1):	0.339
	TH	2.00	937	3,200	0.311 *	N-S(2):	0.386 *
	LT	2.00	240	2,880	0.083	E-W(1):	0.409 *
Westbound	RT	0.00	104	0	0.000	E-W(2):	0.252
	TH	3.00	789	4,800	0.186		
	LT	1.00	126	1,600	0.079 *	V/C:	0.795
Northbound	RT	0.00	80	0	0.000	Lost Time:	0.100
	TH	2.00	740	3,200	0.256	ATSAC:	-0.070
	LT	2.00	216	2,880	0.075 *		
Eastbound	RT	1.00	218	1,600	0.069	ICU:	0.825
	TH	2.00	1,055	3,200	0.330 *		
	LT	1.00	105	1,600	0.066	LOS:	D

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 15
North/South Street: NATIONAL BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	107	0	0.000	N-S(1):	0.348
	TH	2.00	853	3,200	0.300 *	N-S(2):	0.415 *
	LT	2.00	168	2,880	0.058	E-W(1):	0.316
Westbound	RT	0.00	203	0	0.000	E-W(2):	0.372 *
	TH	3.00	1,345	4,800	0.323 *		
	LT	1.00	173	1,600	0.108	V/C:	0.787
Northbound	RT	0.00	84	0	0.000	Lost Time:	0.100
	TH	2.00	844	3,200	0.290	ATSAC:	-0.070
	LT	2.00	331	2,880	0.115 *		
Eastbound	RT	1.00	207	1,600	0.026	ICU:	0.817
	TH	2.00	666	3,200	0.208		
	LT	1.00	78	1,600	0.049 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	80	0	0.000	N-S(1):	0.429
	TH	2.00	1,108	3,200	0.371 *	N-S(2):	0.487 *
	LT	2.00	331	2,880	0.115	E-W(1):	0.465 *
Westbound	RT	0.00	160	0	0.000	E-W(2):	0.304
	TH	3.00	915	4,800	0.224		
	LT	1.00	167	1,600	0.104 *	V/C:	0.952
Northbound	RT	0.00	108	0	0.000	Lost Time:	0.100
	TH	2.00	896	3,200	0.314	ATSAC:	-0.070
	LT	2.00	335	2,880	0.116 *		
Eastbound	RT	1.00	291	1,600	0.077	ICU:	0.982
	TH	2.00	1,156	3,200	0.361 *		
	LT	1.00	128	1,600	0.080	LOS:	E

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 15
North/South Street: NATIONAL BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	125	0	0.000	N-S(1):	0.348
	TH	2.00	853	3,200	0.306 *	N-S(2):	0.426 *
	LT	2.00	168	2,880	0.058	E-W(1):	0.317
Westbound	RT	0.00	203	0	0.000	E-W(2):	0.377 *
	TH	3.00	1,360	4,800	0.326 *		
	LT	1.00	173	1,600	0.108	V/C:	0.803
Northbound	RT	0.00	84	0	0.000	Lost Time:	0.100
	TH	2.00	844	3,200	0.290	ATSAC:	-0.070
	LT	2.00	347	2,880	0.120 *		
Eastbound	RT	1.00	211	1,600	0.023	ICU:	0.833
	TH	2.00	669	3,200	0.209		
	LT	1.00	82	1,600	0.051 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	87	0	0.000	N-S(1):	0.429
	TH	2.00	1,108	3,200	0.373 *	N-S(2):	0.492 *
	LT	2.00	331	2,880	0.115	E-W(1):	0.470 *
Westbound	RT	0.00	160	0	0.000	E-W(2):	0.318
	TH	3.00	921	4,800	0.225		
	LT	1.00	167	1,600	0.104 *	V/C:	0.962
Northbound	RT	0.00	108	0	0.000	Lost Time:	0.100
	TH	2.00	896	3,200	0.314	ATSAC:	-0.070
	LT	2.00	342	2,880	0.119 *		
Eastbound	RT	1.00	309	1,600	0.086	ICU:	0.992
	TH	2.00	1,172	3,200	0.366 *		
	LT	1.00	148	1,600	0.093	LOS:	E

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 16
North/South Street: **HELMS AVENUE**
East/West Street: **WASHINGTON BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.015
	TH	0.00	0	0	0.000 *	N-S(2):	0.071 *
	LT	0.00	0	0	0.000	E-W(1):	0.240
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.439 *
	TH	2.00	1,404	3,200	0.439 *		
	LT	1.00	11	1,600	0.007	V/C:	0.510
Northbound	RT	0.12	14	196	0.015	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.88	100	1,404	0.071 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.540
	TH	2.00	723	3,200	0.233		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.047 *
	LT	0.00	0	0	0.000	E-W(1):	0.433 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.281
	TH	2.00	899	3,200	0.281		
	LT	1.00	22	1,600	0.014 *	V/C:	0.480
Northbound	RT	0.07	5	107	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.93	70	1,493	0.047 *		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.510
	TH	2.00	1,269	3,200	0.419 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 16
North/South Street: HELMS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.015
	TH	0.00	0	0	0.000 *	N-S(2):	0.071 *
	LT	0.00	0	0	0.000	E-W(1):	0.241
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.443 *
	TH	2.00	1,419	3,200	0.443 *		
	LT	1.00	11	1,600	0.007	V/C:	0.514
Northbound	RT	0.12	14	196	0.015	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.88	100	1,404	0.071 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.544
	TH	2.00	726	3,200	0.234		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.047 *
	LT	0.00	0	0	0.000	E-W(1):	0.438 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.283
	TH	2.00	905	3,200	0.283		
	LT	1.00	22	1,600	0.014 *	V/C:	0.485
Northbound	RT	0.07	5	107	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.93	70	1,493	0.047 *		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.515
	TH	2.00	1,285	3,200	0.424 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 16
North/South Street: HELMS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.016
	TH	0.00	0	0	0.000 *	N-S(2):	0.073 *
	LT	0.00	0	0	0.000	E-W(1):	0.276
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.497 *
	TH	2.00	1,591	3,200	0.497 *		
	LT	1.00	11	1,600	0.007	V/C:	0.570
Northbound	RT	0.12	14	193	0.016	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.88	102	1,407	0.073 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.600
	TH	2.00	838	3,200	0.269		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.048 *
	LT	0.00	0	0	0.000	E-W(1):	0.510 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.326
	TH	2.00	1,044	3,200	0.326		
	LT	1.00	22	1,600	0.014 *	V/C:	0.558
Northbound	RT	0.07	5	105	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.93	71	1,495	0.048 *		
Eastbound	RT	0.00	72	0	0.000	ICU:	0.588
	TH	2.00	1,516	3,200	0.496 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 16
North/South Street: HELMS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.016
	TH	0.00	0	0	0.000 *	N-S(2):	0.073 *
	LT	0.00	0	0	0.000	E-W(1):	0.277
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.502 *
	TH	2.00	1,606	3,200	0.502 *		
	LT	1.00	11	1,600	0.007	V/C:	0.575
Northbound	RT	0.12	14	193	0.016	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.88	102	1,407	0.073 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.605
	TH	2.00	841	3,200	0.270		
	LT	0.00	0	0	0.000 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.048 *
	LT	0.00	0	0	0.000	E-W(1):	0.515 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.328
	TH	2.00	1,050	3,200	0.328		
	LT	1.00	22	1,600	0.014 *	V/C:	0.563
Northbound	RT	0.07	5	105	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.93	71	1,495	0.048 *		
Eastbound	RT	0.00	72	0	0.000	ICU:	0.593
	TH	2.00	1,532	3,200	0.501 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 17
North/South Street: LA CIENEGA AVENUE - MCMANUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.93	134	3,092	0.038	N-S(1):	0.103 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.07	74	1,537	0.048 *	E-W(1):	0.222
Westbound	RT	0.00	28	0	0.000	E-W(2):	0.440 *
	TH	2.00	1,351	3,200	0.431 *		
	LT	1.00	14	1,600	0.009	V/C:	0.543
Northbound	RT	0.24	21	382	0.018	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.76	67	1,218	0.055 *		
Eastbound	RT	0.00	10	0	0.000	ICU:	0.573
	TH	2.00	670	3,200	0.213		
	LT	1.00	15	1,600	0.009 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.49	92	2,387	0.030	N-S(1):	0.104 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.51	93	2,172	0.043 *	E-W(1):	0.387 *
Westbound	RT	0.00	31	0	0.000	E-W(2):	0.245
	TH	2.00	711	3,200	0.232		
	LT	1.00	10	1,600	0.006 *	V/C:	0.491
Northbound	RT	0.21	21	343	0.032	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.79	77	1,257	0.061 *		
Eastbound	RT	0.00	20	0	0.000	ICU:	0.521
	TH	2.00	1,199	3,200	0.381 *		
	LT	1.00	21	1,600	0.013	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 17
North/South Street: LA CIENEGA AVENUE - MCMANUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.94	136	3,109	0.039	N-S(1):	0.104 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.06	74	1,522	0.049 *	E-W(1):	0.222
Westbound	RT	0.00	28	0	0.000	E-W(2):	0.444 *
	TH	2.00	1,363	3,200	0.435 *		
	LT	1.00	14	1,600	0.009	V/C:	0.548
Northbound	RT	0.24	21	382	0.018	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.76	67	1,218	0.055 *		
Eastbound	RT	0.00	10	0	0.000	ICU:	0.578
	TH	2.00	673	3,200	0.213		
	LT	1.00	15	1,600	0.009 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.50	93	2,400	0.030	N-S(1):	0.104 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.50	93	2,160	0.043 *	E-W(1):	0.392 *
Westbound	RT	0.00	31	0	0.000	E-W(2):	0.246
	TH	2.00	716	3,200	0.233		
	LT	1.00	10	1,600	0.006 *	V/C:	0.496
Northbound	RT	0.21	21	343	0.032	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.79	77	1,257	0.061 *		
Eastbound	RT	0.00	20	0	0.000	ICU:	0.526
	TH	2.00	1,215	3,200	0.386 *		
	LT	1.00	21	1,600	0.013	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 17
North/South Street: LA CIENEGA AVENUE - MCMANUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.99	147	3,178	0.042	N-S(1):	0.107 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.01	75	1,459	0.051 *	E-W(1):	0.248
Westbound	RT	0.00	29	0	0.000	E-W(2):	0.491 *
	TH	2.00	1,514	3,200	0.482 *		
	LT	1.00	14	1,600	0.009	V/C:	0.598
Northbound	RT	0.24	21	378	0.019	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.76	68	1,222	0.056 *		
Eastbound	RT	0.00	10	0	0.000	ICU:	0.628
	TH	2.00	755	3,200	0.239		
	LT	1.00	15	1,600	0.009 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.49	94	2,387	0.031	N-S(1):	0.107 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.51	95	2,171	0.044 *	E-W(1):	0.448 *
Westbound	RT	0.00	32	0	0.000	E-W(2):	0.284
	TH	2.00	835	3,200	0.271		
	LT	1.00	10	1,600	0.006 *	V/C:	0.555
Northbound	RT	0.21	21	336	0.033	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.79	79	1,264	0.063 *		
Eastbound	RT	0.00	20	0	0.000	ICU:	0.585
	TH	2.00	1,395	3,200	0.442 *		
	LT	1.00	21	1,600	0.013	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 17
North/South Street: LA CIENEGA AVENUE - MCMANUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	149	3,193	0.042	N-S(1):	0.108 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	75	1,446	0.052 *	E-W(1):	0.249
Westbound	RT	0.00	29	0	0.000	E-W(2):	0.495 *
	TH	2.00	1,526	3,200	0.486 *		
	LT	1.00	14	1,600	0.009	V/C:	0.603
Northbound	RT	0.24	21	378	0.019	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.76	68	1,222	0.056 *		
Eastbound	RT	0.00	10	0	0.000	ICU:	0.633
	TH	2.00	758	3,200	0.240		
	LT	1.00	15	1,600	0.009 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.50	95	2,400	0.031	N-S(1):	0.107 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.50	95	2,160	0.044 *	E-W(1):	0.453 *
Westbound	RT	0.00	32	0	0.000	E-W(2):	0.286
	TH	2.00	840	3,200	0.273		
	LT	1.00	10	1,600	0.006 *	V/C:	0.560
Northbound	RT	0.21	21	336	0.033	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.79	79	1,264	0.063 *		
Eastbound	RT	0.00	20	0	0.000	ICU:	0.590
	TH	2.00	1,411	3,200	0.447 *		
	LT	1.00	21	1,600	0.013	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 18
North/South Street: LA CIENEGA BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.404
	TH	3.00	1,042	4,800	0.227 *	N-S(2):	0.421 *
	LT	1.00	133	1,600	0.083	E-W(1):	0.281
Westbound	RT	1.00	320	1,600	0.117	E-W(2):	0.447 *
	TH	2.00	1,314	3,200	0.411 *		
	LT	1.00	69	1,600	0.043	V/C:	0.868
Northbound	RT	0.00	29	0	0.000	Lost Time:	0.100
	TH	3.00	1,514	4,800	0.321	ATSAC:	-0.070
	LT	1.00	310	1,600	0.194 *		
Eastbound	RT	1.00	122	1,600	0.000	ICU:	0.898
	TH	2.00	760	3,200	0.238		
	LT	1.00	57	1,600	0.036 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	17	0	0.000	N-S(1):	0.388 *
	TH	3.00	1,284	4,800	0.271	N-S(2):	0.319
	LT	1.00	302	1,600	0.189 *	E-W(1):	0.422 *
Westbound	RT	1.00	142	1,600	0.000	E-W(2):	0.212
	TH	2.00	556	3,200	0.174		
	LT	1.00	69	1,600	0.043 *	V/C:	0.810
Northbound	RT	0.00	61	0	0.000	Lost Time:	0.100
	TH	3.00	896	4,800	0.199 *	ATSAC:	-0.070
	LT	1.00	77	1,600	0.048		
Eastbound	RT	1.00	119	1,600	0.026	ICU:	0.840
	TH	2.00	1,212	3,200	0.379 *		
	LT	1.00	61	1,600	0.038	LOS:	D

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 18
North/South Street: LA CIENEGA BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.404
	TH	3.00	1,042	4,800	0.227 *	N-S(2):	0.421 *
	LT	1.00	133	1,600	0.083	E-W(1):	0.281
Westbound	RT	1.00	320	1,600	0.117	E-W(2):	0.450 *
	TH	2.00	1,326	3,200	0.414 *		
	LT	1.00	69	1,600	0.043	V/C:	0.871
Northbound	RT	0.00	29	0	0.000	Lost Time:	0.100
	TH	3.00	1,514	4,800	0.321	ATSAC:	-0.070
	LT	1.00	310	1,600	0.194 *		
Eastbound	RT	1.00	122	1,600	0.000	ICU:	0.901
	TH	2.00	763	3,200	0.238		
	LT	1.00	58	1,600	0.036 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	17	0	0.000	N-S(1):	0.388 *
	TH	3.00	1,284	4,800	0.271	N-S(2):	0.319
	LT	1.00	302	1,600	0.189 *	E-W(1):	0.426 *
Westbound	RT	1.00	142	1,600	0.000	E-W(2):	0.215
	TH	2.00	561	3,200	0.175		
	LT	1.00	69	1,600	0.043 *	V/C:	0.814
Northbound	RT	0.00	61	0	0.000	Lost Time:	0.100
	TH	3.00	896	4,800	0.199 *	ATSAC:	-0.070
	LT	1.00	77	1,600	0.048		
Eastbound	RT	1.00	119	1,600	0.026	ICU:	0.844
	TH	2.00	1,226	3,200	0.383 *		
	LT	1.00	64	1,600	0.040	LOS:	D

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 18
North/South Street: LA CIENEGA BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	59	0	0.000	N-S(1):	0.426
	TH	3.00	1,142	4,800	0.250 *	N-S(2):	0.448 *
	LT	1.00	136	1,600	0.085	E-W(1):	0.329
Westbound	RT	1.00	326	1,600	0.119	E-W(2):	0.497 *
	TH	2.00	1,467	3,200	0.458 *		
	LT	1.00	108	1,600	0.068	V/C:	0.945
Northbound	RT	0.00	30	0	0.000	Lost Time:	0.100
	TH	3.00	1,605	4,800	0.341	ATSAC:	-0.070
	LT	1.00	316	1,600	0.198 *		
Eastbound	RT	1.00	132	1,600	0.000	ICU:	0.975
	TH	2.00	836	3,200	0.261		
	LT	1.00	62	1,600	0.039 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	26	0	0.000	N-S(1):	0.413 *
	TH	3.00	1,378	4,800	0.293	N-S(2):	0.342
	LT	1.00	308	1,600	0.193 *	E-W(1):	0.510 *
Westbound	RT	1.00	145	1,600	0.000	E-W(2):	0.257
	TH	2.00	669	3,200	0.209		
	LT	1.00	126	1,600	0.079 *	V/C:	0.923
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	3.00	995	4,800	0.220 *	ATSAC:	-0.070
	LT	1.00	79	1,600	0.049		
Eastbound	RT	1.00	136	1,600	0.036	ICU:	0.953
	TH	2.00	1,379	3,200	0.431 *		
	LT	1.00	76	1,600	0.048	LOS:	E

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 18
North/South Street: LA CIENEGA BOULEVARD
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	59	0	0.000	N-S(1):	0.426
	TH	3.00	1,142	4,800	0.250 *	N-S(2):	0.448 *
	LT	1.00	136	1,600	0.085	E-W(1):	0.330
Westbound	RT	1.00	326	1,600	0.119	E-W(2):	0.501 *
	TH	2.00	1,479	3,200	0.462 *		
	LT	1.00	108	1,600	0.068	V/C:	0.949
Northbound	RT	0.00	30	0	0.000	Lost Time:	0.100
	TH	3.00	1,605	4,800	0.341	ATSAC:	-0.070
	LT	1.00	316	1,600	0.198 *		
Eastbound	RT	1.00	132	1,600	0.000	ICU:	0.979
	TH	2.00	839	3,200	0.262		
	LT	1.00	63	1,600	0.039 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	26	0	0.000	N-S(1):	0.413 *
	TH	3.00	1,378	4,800	0.293	N-S(2):	0.342
	LT	1.00	308	1,600	0.193 *	E-W(1):	0.514 *
Westbound	RT	1.00	145	1,600	0.000	E-W(2):	0.260
	TH	2.00	674	3,200	0.211		
	LT	1.00	126	1,600	0.079 *	V/C:	0.927
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	3.00	995	4,800	0.220 *	ATSAC:	-0.070
	LT	1.00	79	1,600	0.049		
Eastbound	RT	1.00	136	1,600	0.036	ICU:	0.957
	TH	2.00	1,393	3,200	0.435 *		
	LT	1.00	79	1,600	0.049	LOS:	E

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 19
North/South Street: **WESLEY STREET**
East/West Street: **NATIONAL BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.101
	TH	0.00	0	0	0.000 *	N-S(2):	0.139 *
	LT	0.00	0	0	0.000	E-W(1):	0.242
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.260 *
	TH	2.00	833	3,200	0.260 *		
	LT	1.00	22	1,600	0.014	V/C:	0.399
Northbound	RT	0.35	79	567	0.101	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.65	144	1,033	0.139 *		
Eastbound	RT	1.00	239	1,600	0.059	ICU:	0.429
	TH	2.00	729	3,200	0.228		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.027
	TH	0.00	0	0	0.000 *	N-S(2):	0.061 *
	LT	0.00	0	0	0.000	E-W(1):	0.372 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.291
	TH	2.00	930	3,200	0.291		
	LT	1.00	14	1,600	0.009 *	V/C:	0.433
Northbound	RT	0.26	25	408	0.027	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.74	73	1,192	0.061 *		
Eastbound	RT	1.00	93	1,600	0.013	ICU:	0.463
	TH	2.00	1,160	3,200	0.363 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 19
North/South Street: WESLEY STREET
East/West Street: NATIONAL BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.101
	TH	0.00	0	0	0.000 *	N-S(2):	0.139 *
	LT	0.00	0	0	0.000	E-W(1):	0.243
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.265 *
	TH	2.00	849	3,200	0.265 *		
	LT	1.00	22	1,600	0.014	V/C:	0.404
Northbound	RT	0.35	79	567	0.101	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.65	144	1,033	0.139 *		
Eastbound	RT	1.00	239	1,600	0.059	ICU:	0.434
	TH	2.00	733	3,200	0.229		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.027
	TH	0.00	0	0	0.000 *	N-S(2):	0.061 *
	LT	0.00	0	0	0.000	E-W(1):	0.377 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.293
	TH	2.00	937	3,200	0.293		
	LT	1.00	14	1,600	0.009 *	V/C:	0.438
Northbound	RT	0.26	25	408	0.027	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.74	73	1,192	0.061 *		
Eastbound	RT	1.00	93	1,600	0.013	ICU:	0.468
	TH	2.00	1,178	3,200	0.368 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 19
North/South Street: **WESLEY STREET**
East/West Street: **NATIONAL BOULEVARD**

Scenario: **CUMULATIVE (2018) BASE CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.104
	TH	0.00	0	0	0.000 *	N-S(2):	0.143 *
	LT	0.00	0	0	0.000	E-W(1):	0.317
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.347 *
	TH	2.00	1,109	3,200	0.347 *		
	LT	1.00	22	1,600	0.014	V/C:	0.490
Northbound	RT	0.36	81	568	0.104	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.64	147	1,032	0.143 *		
Eastbound	RT	1.00	245	1,600	0.061	ICU:	0.520
	TH	2.00	970	3,200	0.303		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.029
	TH	0.00	0	0	0.000 *	N-S(2):	0.063 *
	LT	0.00	0	0	0.000	E-W(1):	0.465 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.386
	TH	2.00	1,236	3,200	0.386		
	LT	1.00	14	1,600	0.009 *	V/C:	0.528
Northbound	RT	0.26	26	412	0.029	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.74	75	1,188	0.063 *		
Eastbound	RT	1.00	96	1,600	0.013	ICU:	0.558
	TH	2.00	1,459	3,200	0.456 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 19
North/South Street: **WESLEY STREET**
East/West Street: **NATIONAL BOULEVARD**

Scenario: **CUMULATIVE (2018) PLUS PROJECT CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.104
	TH	0.00	0	0	0.000 *	N-S(2):	0.143 *
	LT	0.00	0	0	0.000	E-W(1):	0.318
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.352 *
	TH	2.00	1,125	3,200	0.352 *		
	LT	1.00	22	1,600	0.014	V/C:	0.495
Northbound	RT	0.36	81	568	0.104	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.64	147	1,032	0.143 *		
Eastbound	RT	1.00	245	1,600	0.061	ICU:	0.525
	TH	2.00	974	3,200	0.304		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes		Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.029
	TH	0.00	0	0	0.000 *	N-S(2):	0.063 *
	LT	0.00	0	0	0.000	E-W(1):	0.471 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.388
	TH	2.00	1,243	3,200	0.388		
	LT	1.00	14	1,600	0.009 *	V/C:	0.534
Northbound	RT	0.26	26	412	0.029	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.74	75	1,188	0.063 *		
Eastbound	RT	1.00	96	1,600	0.013	ICU:	0.564
	TH	2.00	1,477	3,200	0.462 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 20
North/South Street: **HAYDEN AVENUE**
East/West Street: **NATIONAL BOULEVARD**

Scenario: **EXISTING (2016) CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.115 *
	LT	0.00	0	0	0.000	E-W(1):	0.316 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.189
	TH	2.00	602	3,200	0.188		
	LT	1.00	185	1,600	0.116 *	V/C:	0.431
Northbound	RT	0.26	43	416	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.74	288	2,506	0.115 *		
Eastbound	RT	1.00	254	1,600	0.055	ICU:	0.461
	TH	2.00	640	3,200	0.200 *		
	LT	0.00	1	1,600	0.001	LOS:	A

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.137
	TH	0.00	0	0	0.000 *	N-S(2):	0.178 *
	LT	0.00	0	0	0.000	E-W(1):	0.260 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.137
	TH	2.00	438	3,200	0.137		
	LT	1.00	17	1,600	0.011 *	V/C:	0.438
Northbound	RT	0.46	119	744	0.137	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.54	393	2,211	0.178 *		
Eastbound	RT	1.00	338	1,600	0.051	ICU:	0.468
	TH	2.00	796	3,200	0.249 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: **8888 WASHINGTON BOULEVARD MIXED-USE PROJECT**
INT # 20
North/South Street: **HAYDEN AVENUE**
East/West Street: **NATIONAL BOULEVARD**

Scenario: **EXISTING (2016) PLUS PROJECT CONDITIONS**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: **AM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.116 *
	LT	0.00	0	0	0.000	E-W(1):	0.318 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.193
	TH	2.00	614	3,200	0.192		
	LT	1.00	185	1,600	0.116 *	V/C:	0.434
Northbound	RT	0.26	43	411	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.74	292	2,510	0.116 *		
Eastbound	RT	1.00	254	1,600	0.054	ICU:	0.464
	TH	2.00	644	3,200	0.202 *		
	LT	0.00	1	1,600	0.001	LOS:	A

Peak Period: **PM PEAK HOUR**

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.138
	TH	0.00	0	0	0.000 *	N-S(2):	0.178 *
	LT	0.00	0	0	0.000	E-W(1):	0.265 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.138
	TH	2.00	443	3,200	0.138		
	LT	1.00	17	1,600	0.011 *	V/C:	0.443
Northbound	RT	0.46	119	741	0.138	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.54	395	2,213	0.178 *		
Eastbound	RT	1.00	338	1,600	0.051	ICU:	0.473
	TH	2.00	814	3,200	0.254 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 20
North/South Street: HAYDEN AVENUE
East/West Street: NATIONAL BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.147 *
	LT	0.00	0	0	0.000	E-W(1):	0.399 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.257
	TH	2.00	818	3,200	0.256		
	LT	1.00	210	1,600	0.131 *	V/C:	0.546
Northbound	RT	0.34	72	546	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.66	350	2,389	0.147 *		
Eastbound	RT	1.00	282	1,600	0.044	ICU:	0.576
	TH	2.00	857	3,200	0.268 *		
	LT	0.00	1	1,600	0.001	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.147
	TH	0.00	0	0	0.000 *	N-S(2):	0.211 *
	LT	0.00	0	0	0.000	E-W(1):	0.355 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.212
	TH	2.00	677	3,200	0.212		
	LT	1.00	34	1,600	0.021 *	V/C:	0.566
Northbound	RT	0.50	151	793	0.147	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.50	458	2,166	0.211 *		
Eastbound	RT	1.00	363	1,600	0.037	ICU:	0.596
	TH	2.00	1,070	3,200	0.334 *		
	LT	0.00	0	0	0.000	LOS:	A

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 20
North/South Street: HAYDEN AVENUE
East/West Street: NATIONAL BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.148 *
	LT	0.00	0	0	0.000	E-W(1):	0.400 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.260
	TH	2.00	830	3,200	0.259		
	LT	1.00	210	1,600	0.131 *	V/C:	0.548
Northbound	RT	0.34	72	541	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.66	354	2,393	0.148 *		
Eastbound	RT	1.00	282	1,600	0.043	ICU:	0.578
	TH	2.00	861	3,200	0.269 *		
	LT	0.00	1	1,600	0.001	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.148
	TH	0.00	0	0	0.000 *	N-S(2):	0.212 *
	LT	0.00	0	0	0.000	E-W(1):	0.361 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.213
	TH	2.00	682	3,200	0.213		
	LT	1.00	34	1,600	0.021 *	V/C:	0.573
Northbound	RT	0.49	151	791	0.148	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	1.51	460	2,168	0.212 *		
Eastbound	RT	1.00	363	1,600	0.036	ICU:	0.603
	TH	2.00	1,088	3,200	0.340 *		
	LT	0.00	0	0	0.000	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Jefferson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
21	East-West Street:	National Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	326	1	**326**	0	326	**326**	31	364	1	**364**	0	364	1	**364**	0	364	1	**364**
Left-Through		0							0				0				0	
Through	712	2	356	0	712	356	42	768	2	384	0	768	2	384	0	768	2	384
Through-Right		0							0				0				0	
Right	24	1	23	0	24	23	76	100	1	94	0	100	1	94	0	100	1	94
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	18	1	18	0	18	18	75	93	1	93	0	93	1	93	0	93	1	93
Left-Through		0							0				0				0	
Through	856	1	**856**	0	856	**856**	74	947	1	**947**	0	947	1	**947**	0	947	1	**947**
Through-Right		0							0				0				0	
Right	674	1	528	12	686	538	173	861	1	619	12	873	1	630	0	873	1	630
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	269	1	**146**	3	272	**148**	110	384	1	**242**	3	387	1	**243**	0	387	1	**243**
Left-Through		1							1				1				1	
Through	23	0	146	0	23	148	76	99	0	242	0	99	0	243	0	99	0	243
Through-Right		0							0				0				0	
Right	284	1	0	1	285	0	14	304	1	0	1	305	1	0	0	305	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	2	0	2	0	2	2	10	12	0	12	0	12	0	12	0	12	0	12
Left-Through		1							1				1				1	
Through	10	0	**12**	0	10	**12**	20	30	0	**42**	0	30	0	**42**	0	30	0	**42**
Through-Right		0							0				0				0	
Right	8	1	8	0	8	8	10	18	1	18	0	18	1	18	0	18	1	18
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		1182	*North-South:*		1182	*North-South:*			1311	*North-South:*			1311	*North-South:*			1311
	East-West:		158	*East-West:*		160	*East-West:*			284	*East-West:*			285	*East-West:*			285
	SUM:		1340	*SUM:*		1342	*SUM:*			1595	*SUM:*			1596	*SUM:*			1596
VOLUME/CAPACITY *(V/C)* RATIO:			0.975			0.976				1.160				1.161				1.161
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.875**			**0.876**				**1.060**				**1.061**				**1.061**
LEVEL OF SERVICE (LOS):			D			D				F				F				F

	NB--	EB--	SB--	WB--
Right Turns: FREE-1, NRTOR-2 or OLA-3?	0	3	3	2

No. of Phases	4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	2
ATSAC-1 or ATSAC+ATCS-2?	2
Override Capacity	0

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Jefferson Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
21	East-West Street:	National Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			4			4			3				3				3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2			2				2				2	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		3	NB-- 0 SB--		3	NB-- 0 SB--		3		NB-- 0 SB--		3		NB-- 0 SB--		3	
	EB-- 3 WB--		2	EB-- 3 WB--		2	EB-- 3 WB--		2		EB-- 3 WB--		2		EB-- 3 WB--		2	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
Override Capacity			0			0			0				0				0	
NORTHBOUND																		
Left	177	1	**177**	0	177	**177**	21	202	1	**202**	0	202	1	**202**	0	202	1	**202**
Left-Through		0							0				0				0	
Through	994	2	497	0	994	497	68	1082	2	541	0	1082	2	541	0	1082	2	541
Through-Right		0							0				0				0	
Right	6	1	3	0	6	3	14	20	1	0	0	20	1	0	0	20	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	4	1	4	0	4	4	13	17	1	17	0	17	1	17	0	17	1	17
Left-Through		0							0				0				0	
Through	402	1	**402**	0	402	**402**	63	473	1	**473**	0	473	1	**473**	0	473	1	**473**
Through-Right		0							0				0				0	
Right	201	1	0	5	206	0	159	364	1	7	5	369	1	5	0	369	1	5
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	481	1	**245**	14	495	**252**	193	684	1	**357**	14	698	1	**364**	0	698	1	**364**
Left-Through		1							1				1				1	
Through	8	0	245	0	8	252	21	29	0	357	0	29	0	364	0	29	0	364
Through-Right		0							0				0				0	
Right	363	1	186	5	368	191	48	418	1	216	5	423	1	221	0	423	1	221
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	6	0	6	0	6	6	66	72	0	72	0	72	0	72	0	72	0	72
Left-Through		1							1				1				1	
Through	14	0	**20**	0	14	**20**	69	83	0	**155**	0	83	0	**155**	0	83	0	**155**
Through-Right		0							0				0				0	
Right	17	1	17	0	17	17	66	83	1	83	0	83	1	83	0	83	1	83
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		579	*North-South:*		579	*North-South:*			675	*North-South:*			675	*North-South:*			675
	East-West:		265	*East-West:*		272	*East-West:*			512	*East-West:*			519	*East-West:*			519
	SUM:		844	*SUM:*		851	*SUM:*			1187	*SUM:*			1194	*SUM:*			1194
VOLUME/CAPACITY *(V/C)* RATIO:			0.614			0.619				0.833				0.838				0.838
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.514**			**0.519**				**0.733**				**0.738**				**0.738**
LEVEL OF SERVICE (LOS):			**A**			**A**				**C**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.005	Δ*v/c* after mitigation:	0.005
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Jefferson Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
22	East-West Street:	Higuera Street-Rodeo Road	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

No. of Phases			3			3			3			3			3			3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	*0*	3 *SB--*	0	*NB--*	3 *SB--*	0	*NB--*	3 *SB--*	0	*NB--*	3 *SB--*	0	*NB--*	3 *SB--*	0	*NB--*	3 *SB--*	0	
	EB--	0 *WB--*	0	*EB--*	0 *WB--*	0	*EB--*	0 *WB--*	0	*EB--*	0 *WB--*	0	*EB--*	0 *WB--*	0	*EB--*	0 *WB--*	0	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	120	1	**120**	0	120	**120**	10	132	1	**132**	0	132	1	**132**	0	132	1	**132**
	Left-Through		0							0				0				0	
	Through	745	2	373	0	745	373	86	846	2	423	0	846	2	423	0	846	2	423
	Through-Right		0							0				0				0	
	Right	463	0	0	0	463	0	18	490	0	0	0	490	0	0	0	490	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	138	1	138	1	139	139	20	161	1	161	1	162	1	162	0	162	1	162
	Left-Through		0							0				0				0	
	Through	834	2	**417**	0	834	**417**	66	917	2	**459**	0	917	2	**459**	0	917	2	**459**
	Through-Right		0							0				0				0	
	Right	54	1	37	0	54	37	14	69	1	51	0	69	1	51	0	69	1	51
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	35	1	**35**	0	35	**35**	0	36	1	**36**	0	36	1	**36**	0	36	1	**36**
	Left-Through		0							0				0				0	
	Through	146	2	73	0	146	73	11	160	2	80	0	160	2	80	0	160	2	80
	Through-Right		0							0				0				0	
	Right	55	1	0	0	55	0	7	63	1	0	0	63	1	0	0	63	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	896	2	493	0	896	493	42	956	2	526	0	956	2	526	0	956	2	526
	Left-Through		0							0				0				0	
	Through	649	1	**649**	4	653	**653**	27	689	1	**689**	4	693	1	**693**	0	693	1	**693**
	Through-Right		0							0				0				0	
	Right	366	1	297	0	366	297	72	445	1	365	0	445	1	364	0	445	1	364
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		537	*North-South:*		537	*North-South:*			591	*North-South:*			591	*North-South:*			591
		East-West:		684	*East-West:*		688	*East-West:*			725	*East-West:*			729	*East-West:*			729
		SUM:		1221	*SUM:*		1225	*SUM:*			1316	*SUM:*			1320	*SUM:*			1320
VOLUME/CAPACITY *(V/C)* RATIO:				0.857			0.860				0.924				0.926				0.926
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.757**			**0.760**				**0.824**				**0.826**				**0.826**
LEVEL OF SERVICE (LOS):				C			C				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Jefferson Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
22	East-West Street:	Higuera Street-Rodeo Road	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			3			3			3				3					3
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB--		0	NB-- 3 SB--		0	NB-- 3 SB--		0		NB-- 3 SB--		0		NB-- 3 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	34	1	34	0	34	34	8	43	1	43	0	43	1	43	0	43	1	43
	Left-Through		0							0				0				0	
	Through	949	2	475	0	949	475	73	1041	2	521	0	1041	2	521	0	1041	2	521
	Through-Right		0							0				0				0	
	Right	804	0	0	0	804	0	44	864	0	0	0	864	0	0	0	864	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	164	1	164	5	169	169	84	251	1	251	5	256	1	256	0	256	1	256
	Left-Through		0							0				0				0	
	Through	583	2	292	0	583	292	91	686	2	343	0	686	2	343	0	686	2	343
	Through-Right		0							0				0				0	
	Right	46	1	32	0	46	32	11	58	1	44	0	58	1	44	0	58	1	44
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	28	1	28	0	28	28	0	29	1	29	0	29	1	29	0	29	1	29
	Left-Through		0							0				0				0	
	Through	629	2	315	0	629	315	13	655	2	328	0	655	2	328	0	655	2	328
	Through-Right		0							0				0				0	
	Right	128	1	111	0	128	111	7	138	1	117	0	138	1	117	0	138	1	117
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	407	2	224	0	407	224	23	438	2	241	0	438	2	241	0	438	2	241
	Left-Through		0							0				0				0	
	Through	181	1	181	2	183	183	22	207	1	207	2	209	1	209	0	209	1	209
	Through-Right		0							0				0				0	
	Right	114	1	32	0	114	30	30	146	1	21	0	146	1	18	0	146	1	18
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		639	North-South:		644	North-South:			772	North-South:			777	North-South:			777
		East-West:		539	East-West:		539	East-West:			569	East-West:			569	East-West:			569
		SUM:		1178	SUM:		1183	SUM:			1341	SUM:			1346	SUM:			1346
	VOLUME/CAPACITY (V/C) RATIO:			0.827			0.830				0.941				0.945				0.945
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.727			0.730				0.841				0.845				0.845
	LEVEL OF SERVICE (LOS):			C			C				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.004 — Δ*v/c* after mitigation: 0.004

Significant impacted? NO — Fully mitigated? N/A

Intersection	
Intersection Delay, s/veh	55.2
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	19	582	789	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	20	606	822	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	63.4
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	3%	0%	0%	0%	0%
Vol Thru, %	97%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	601	789	120	120	833
LT Vol	19	0	0	0	0
Through Vol	582	0	120	120	0
RT Vol	0	789	0	0	833
Lane Flow Rate	626	822	125	125	868
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.251	0.251	1
Departure Headway (Hd)	6.929	6.21	7.218	7.218	4.79
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	532	592	501	501	764
Service Time	4.626	3.916	4.918	4.918	2.49
HCM Lane V/C Ratio	1.177	1.389	0.25	0.25	1.136
HCM Control Delay	65.5	61.8	12.3	12.3	53.9
HCM Lane LOS	F	F	B	B	F
HCM 95th-tile Q	14	14.7	1	1	16.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	240	833
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	250	868
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	44.6
HCM LOS	E

Lane

Intersection	
Intersection Delay, s/veh	41.8
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	38	474	567	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	40	494	591	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	64
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	7%	0%	0%	0%	0%
Vol Thru, %	93%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	512	567	242	242	532
LT Vol	38	0	0	0	0
Through Vol	474	0	242	242	0
RT Vol	0	567	0	0	532
Lane Flow Rate	533	591	252	252	554
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.499	0.499	0.734
Departure Headway (Hd)	7.021	6.28	7.12	7.12	4.771
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	517	579	502	502	759
Service Time	4.739	3.998	4.918	4.918	2.49
HCM Lane V/C Ratio	1.031	1.021	0.502	0.502	0.73
HCM Control Delay	66	62.2	16.9	16.9	19.5
HCM Lane LOS	F	F	C	C	C
HCM 95th-tile Q	13.8	14.6	2.7	2.7	6.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	484	532
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	504	554
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	18.3
HCM LOS	C

Lane

Intersection	
Intersection Delay, s/veh	55.2
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	19	584	789	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	20	608	822	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	63.4
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	3%	0%	0%	0%	0%
Vol Thru, %	97%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	603	789	120	120	833
LT Vol	19	0	0	0	0
Through Vol	584	0	120	120	0
RT Vol	0	789	0	0	833
Lane Flow Rate	628	822	125	125	868
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.251	0.251	1
Departure Headway (Hd)	6.929	6.21	7.218	7.218	4.79
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	528	592	501	501	764
Service Time	4.626	3.916	4.918	4.918	2.49
HCM Lane V/C Ratio	1.189	1.389	0.25	0.25	1.136
HCM Control Delay	65.5	61.8	12.3	12.3	53.9
HCM Lane LOS	F	F	B	B	F
HCM 95th-tile Q	14	14.7	1	1	16.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	240	833
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	250	868
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	44.6
HCM LOS	E

Lane

Intersection	
Intersection Delay, s/veh	41.9
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	38	483	567	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	40	503	591	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	64
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	7%	0%	0%	0%	0%
Vol Thru, %	93%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	521	567	242	242	532
LT Vol	38	0	0	0	0
Through Vol	483	0	242	242	0
RT Vol	0	567	0	0	532
Lane Flow Rate	543	591	252	252	554
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.5	0.5	0.734
Departure Headway (Hd)	7.025	6.285	7.135	7.135	4.771
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	521	579	502	502	759
Service Time	4.74	4	4.918	4.918	2.49
HCM Lane V/C Ratio	1.042	1.021	0.502	0.502	0.73
HCM Control Delay	66	62.2	16.9	16.9	19.5
HCM Lane LOS	F	F	C	C	C
HCM 95th-tile Q	13.8	14.6	2.8	2.8	6.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	484	532
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	504	554
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	18.3
HCM LOS	C

Lane

Intersection	
Intersection Delay, s/veh	54.4
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	19	649	841	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	20	676	876	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	64.3
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	3%	0%	0%	0%	0%
Vol Thru, %	97%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	668	841	183	183	850
LT Vol	19	0	0	0	0
Through Vol	649	0	183	183	0
RT Vol	0	841	0	0	850
Lane Flow Rate	696	876	190	190	885
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.381	0.381	1
Departure Headway (Hd)	7.056	6.348	7.218	7.218	4.79
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	515	578	502	502	761
Service Time	4.79	4.082	4.918	4.918	2.49
HCM Lane V/C Ratio	1.351	1.516	0.378	0.378	1.163
HCM Control Delay	66.3	62.7	14.3	14.3	53.9
HCM Lane LOS	F	F	B	B	F
HCM 95th-tile Q	13.8	14.5	1.8	1.8	16.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	365	850
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	380	885
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	42
HCM LOS	E

Lane

Intersection	
Intersection Delay, s/veh	44.7
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	39	639	664	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	41	666	692	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	65
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	6%	0%	0%	0%	0%
Vol Thru, %	94%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	678	664	286	286	543
LT Vol	39	0	0	0	0
Through Vol	639	0	286	286	0
RT Vol	0	664	0	0	543
Lane Flow Rate	706	692	297	297	566
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.596	0.596	0.753
Departure Headway (Hd)	7.199	6.467	7.218	7.218	4.79
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	509	567	503	503	758
Service Time	4.899	4.167	4.918	4.918	2.49
HCM Lane V/C Ratio	1.387	1.22	0.59	0.59	0.747
HCM Control Delay	66.8	63.1	20	20	20.6
HCM Lane LOS	F	F	C	C	C
HCM 95th-tile Q	13.7	14.4	3.8	3.8	7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	571	543
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	595	566
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	20.3
HCM LOS	C

Lane

Intersection	
Intersection Delay, s/veh	54.4
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	19	651	841	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	20	678	876	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	64.3
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	3%	0%	0%	0%	0%
Vol Thru, %	97%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	670	841	183	183	850
LT Vol	19	0	0	0	0
Through Vol	651	0	183	183	0
RT Vol	0	841	0	0	850
Lane Flow Rate	698	876	190	190	885
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.381	0.381	1
Departure Headway (Hd)	7.056	6.348	7.218	7.218	4.79
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	516	578	502	502	761
Service Time	4.79	4.082	4.918	4.918	2.49
HCM Lane V/C Ratio	1.353	1.516	0.378	0.378	1.163
HCM Control Delay	66.3	62.7	14.3	14.3	53.9
HCM Lane LOS	F	F	B	B	F
HCM 95th-tile Q	13.8	14.5	1.8	1.8	16.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	365	850
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	380	885
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	42
HCM LOS	E

Lane

Intersection	
Intersection Delay, s/veh	44.8
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	0	0	0	39	648	664	0	0	0	0
Peak Hour Factor	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	41	675	692	0	0	0	0
Number of Lanes	0	0	0	0	0	0	1	1	0	0	0	0

Approach	WB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	
Conflicting Lanes Left	0
Conflicting Approach Right	SB
Conflicting Lanes Right	3
HCM Control Delay	65
HCM LOS	F

Lane	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	6%	0%	0%	0%	0%
Vol Thru, %	94%	0%	100%	100%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	687	664	286	286	543
LT Vol	39	0	0	0	0
Through Vol	648	0	286	286	0
RT Vol	0	664	0	0	543
Lane Flow Rate	716	692	297	297	566
Geometry Grp	8	8	7	7	7
Degree of Util (X)	1	1	0.596	0.596	0.753
Departure Headway (Hd)	7.199	6.467	7.218	7.218	4.79
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	508	567	503	503	758
Service Time	4.899	4.167	4.918	4.918	2.49
HCM Lane V/C Ratio	1.409	1.22	0.59	0.59	0.747
HCM Control Delay	66.8	63.1	20	20	20.6
HCM Lane LOS	F	F	C	C	C
HCM 95th-tile Q	13.7	14.4	3.8	3.8	7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	0	571	543
Peak Hour Factor	0.92	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	595	566
Number of Lanes	0	0	2	1

Approach	SB
Opposing Approach	
Opposing Lanes	0
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	
Conflicting Lanes Right	0
HCM Control Delay	20.3
HCM LOS	C

Lane

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
23	East-West Street:	I-10 WB On-Ramp/Robertson Bl	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
No. of Phases	0	0	0	0	0
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1
ATSAC-1 or ATSAC+ATCS-2?		0	0	0	0
Override Capacity	1200	1200	1200	1200	1200

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	240	2	**120**	0	240	**120**	120	365	2	**183**	0	365	2	**183**	0	365	2	**183**
	Through-Right		0							0				0				0	
	Right	833	1	0	0	833	0	0	850	1	0	0	850	1	0	0	850	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	19	0	19	0	19	19	0	19	0	19	0	19	0	19	0	19	0	19
	Left-Through		1							1				1				1	
	Through	582	0	**601**	2	584	**603**	55	649	0	**668**	2	651	0	**670**	0	651	0	**670**
	Through-Right		0							0				0				0	
	Right	789	1	0	0	789	0	36	841	1	0	0	841	1	0	0	841	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		120	*North-South:*		120	*North-South:*			183	*North-South:*			183	*North-South:*			183
		East-West:		601	*East-West:*		603	*East-West:*			668	*East-West:*			670	*East-West:*			670
		SUM:		721	*SUM:*		723	*SUM:*			851	*SUM:*			853	*SUM:*			853
	VOLUME/CAPACITY *(V/C)* RATIO:			0.601			0.603				0.709				0.711				0.711
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.601			0.603				0.709				0.711				0.711
	LEVEL OF SERVICE (LOS):			B			B				C				C				C

REMARKS: Unsignalized intersection.

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	*Δv/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
23	East-West Street:	I-10 WB On-Ramp/Robertson Bl	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
No. of Phases	0	0	0	0	0
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1	NB-- 0 SB-- 1 EB-- 0 WB-- 1
ATSAC-1 or ATSAC+ATCS-2?	0	0	0	0	0
Override Capacity	1200	1200	1200	1200	1200

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	484	2	**242**	0	484	**242**	77	571	2	**286**	0	571	2	**286**	0	571	2	**286**
	Through-Right		0							0				0				0	
	Right	532	1	0	0	532	0	0	543	1	0	0	543	1	0	0	543	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	38	0	38	0	38	38	0	39	0	39	0	39	0	39	0	39	0	39
	Left-Through		1							1				1				1	
	Through	474	0	**512**	9	483	**521**	155	639	0	**678**	9	648	0	**687**	0	648	0	**687**
	Through-Right		0							0				0				0	
	Right	567	1	0	0	567	0	86	664	1	0	0	664	1	0	0	664	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		242	*North-South:*		242	*North-South:*			286	*North-South:*			286	*North-South:*			286
		East-West:		512	*East-West:*		521	*East-West:*			678	*East-West:*			687	*East-West:*			687
		SUM:		754	*SUM:*		763	*SUM:*			964	*SUM:*			973	*SUM:*			973
	VOLUME/CAPACITY *(V/C)* RATIO:			0.628			0.636				0.803				0.811				0.811
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.628			0.636				0.803				0.811				0.811
	LEVEL OF SERVICE (LOS):			B			B				D				D				D

REMARKS: Unsignalized intersection.

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.008	*Δv/c* after mitigation:	0.008
Significant impacted?	NO	Fully mitigated?	N/A

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	4	0	0	0	0	247	11
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	0	0	0	257	11
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	7.7	10.4
HCM LOS	A	B

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	4	247	11
LT Vol	0	247	0
Through Vol	4	0	0
RT Vol	0	0	11
Lane Flow Rate	4	257	11
Geometry Grp	2	7	7
Degree of Util (X)	0.005	0.36	0.012
Departure Headway (Hd)	4.648	5.042	3.842
Convergence, Y/N	Yes	Yes	Yes
Cap	775	718	937
Service Time	2.648	2.744	1.544
HCM Lane V/C Ratio	0.005	0.358	0.012
HCM Control Delay	7.7	10.6	6.6
HCM Lane LOS	A	B	A
HCM 95th-tile Q	0	1.6	0

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	66	0	0	0	0	431	62
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	69	0	0	0	0	449	65
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	8.8	15.7
HCM LOS	A	C

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	66	431	62
LT Vol	0	431	0
Through Vol	66	0	0
RT Vol	0	0	62
Lane Flow Rate	69	449	65
Geometry Grp	2	7	7
Degree of Util (X)	0.1	0.643	0.071
Departure Headway (Hd)	5.231	5.155	3.954
Convergence, Y/N	Yes	Yes	Yes
Cap	690	696	894
Service Time	3.231	2.933	1.73
HCM Lane V/C Ratio	0.1	0.645	0.073
HCM Control Delay	8.8	16.9	7
HCM Lane LOS	A	C	A
HCM 95th-tile Q	0.3	4.7	0.2

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	4	0	0	0	0	247	11
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	0	0	0	257	11
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	7.7	10.4
HCM LOS	A	B

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	4	247	11
LT Vol	0	247	0
Through Vol	4	0	0
RT Vol	0	0	11
Lane Flow Rate	4	257	11
Geometry Grp	2	7	7
Degree of Util (X)	0.005	0.36	0.012
Departure Headway (Hd)	4.648	5.042	3.842
Convergence, Y/N	Yes	Yes	Yes
Cap	775	718	937
Service Time	2.648	2.744	1.544
HCM Lane V/C Ratio	0.005	0.358	0.012
HCM Control Delay	7.7	10.6	6.6
HCM Lane LOS	A	B	A
HCM 95th-tile Q	0	1.6	0

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	4	0	0	0	0	372	11
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	0	0	0	388	11
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	8	13.4
HCM LOS	A	B

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	4	372	11
LT Vol	0	372	0
Through Vol	4	0	0
RT Vol	0	0	11
Lane Flow Rate	4	388	11
Geometry Grp	2	7	7
Degree of Util (X)	0.006	0.543	0.012
Departure Headway (Hd)	4.999	5.042	3.842
Convergence, Y/N	Yes	Yes	Yes
Cap	720	721	936
Service Time	2.999	2.746	1.546
HCM Lane V/C Ratio	0.006	0.538	0.012
HCM Control Delay	8	13.6	6.6
HCM Lane LOS	A	B	A
HCM 95th-tile Q	0	3.3	0

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	66	0	0	0	0	431	62
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	69	0	0	0	0	449	65
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	8.8	15.7
HCM LOS	A	C

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	66	431	62
LT Vol	0	431	0
Through Vol	66	0	0
RT Vol	0	0	62
Lane Flow Rate	69	449	65
Geometry Grp	2	7	7
Degree of Util (X)	0.1	0.643	0.071
Departure Headway (Hd)	5.231	5.155	3.954
Convergence, Y/N	Yes	Yes	Yes
Cap	690	696	894
Service Time	3.231	2.933	1.73
HCM Lane V/C Ratio	0.1	0.645	0.073
HCM Control Delay	8.8	16.9	7
HCM Lane LOS	A	C	A
HCM 95th-tile Q	0.3	4.7	0.2

Intersection	
Intersection Delay, s/veh	20.2
Intersection LOS	C

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	67	0	0	0	0	517	63
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	70	0	0	0	0	539	66
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	9.1	21.5
HCM LOS	A	C

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	67	517	63
LT Vol	0	517	0
Through Vol	67	0	0
RT Vol	0	0	63
Lane Flow Rate	70	539	66
Geometry Grp	2	7	7
Degree of Util (X)	0.106	0.771	0.072
Departure Headway (Hd)	5.463	5.157	3.956
Convergence, Y/N	Yes	Yes	Yes
Cap	660	695	892
Service Time	3.463	2.944	1.742
HCM Lane V/C Ratio	0.106	0.776	0.074
HCM Control Delay	9.1	23.3	7.1
HCM Lane LOS	A	C	A
HCM 95th-tile Q	0.4	7.4	0.2

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	4	0	0	0	0	372	11
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	0	0	0	388	11
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	8	13.4
HCM LOS	A	B

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	4	372	11
LT Vol	0	372	0
Through Vol	4	0	0
RT Vol	0	0	11
Lane Flow Rate	4	388	11
Geometry Grp	2	7	7
Degree of Util (X)	0.006	0.543	0.012
Departure Headway (Hd)	4.999	5.042	3.842
Convergence, Y/N	Yes	Yes	Yes
Cap	720	721	936
Service Time	2.999	2.746	1.546
HCM Lane V/C Ratio	0.006	0.538	0.012
HCM Control Delay	8	13.6	6.6
HCM Lane LOS	A	B	A
HCM 95th-tile Q	0	3.3	0

Intersection	
Intersection Delay, s/veh	20.2
Intersection LOS	C

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	67	0	0	0	0	517	63
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	70	0	0	0	0	539	66
Number of Lanes	0	0	1	0	0	0	0	1	1

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	2	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	9.1	21.5
HCM LOS	A	C

Lane	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%
Vol Thru, %	100%	0%	0%
Vol Right, %	0%	0%	100%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	67	517	63
LT Vol	0	517	0
Through Vol	67	0	0
RT Vol	0	0	63
Lane Flow Rate	70	539	66
Geometry Grp	2	7	7
Degree of Util (X)	0.106	0.771	0.072
Departure Headway (Hd)	5.463	5.157	3.956
Convergence, Y/N	Yes	Yes	Yes
Cap	660	695	892
Service Time	3.463	2.944	1.742
HCM Lane V/C Ratio	0.106	0.776	0.074
HCM Control Delay	9.1	23.3	7.1
HCM Lane LOS	A	C	A
HCM 95th-tile Q	0.4	7.4	0.2

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	RA	Date:	1/24/2017
24	East-West Street:	Exposition Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	RA	Project:	RA491

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			0			0			0				0				0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	1	NB-- 0	SB--	1	NB-- 0	SB--	1		NB-- 0	SB--	1		NB-- 0	SB--	1	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0		EB-- 0	WB--	0		EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0				0	
Override Capacity			1200			1200			1200				1200				1200	

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	247	1	**247**	0	247	**247**	120	372	1	**372**	0	372	1	**372**	0	372	1	**372**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	11	1	0	0	11	0	0	11	1	0	0	11	1	0	0	11	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	4	1	**4**	0	4	**4**	0	4	1	**4**	0	4	1	**4**	0	4	1	**4**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		247	North-South:		247	North-South:			372	North-South:			372	North-South:			372
		East-West:		4	East-West:		4	East-West:			4	East-West:			4	East-West:			4
		SUM:		251	SUM:		251	SUM:			376	SUM:			376	SUM:			376
VOLUME/CAPACITY (V/C) RATIO:				0.209			0.209				0.313				0.313				0.313
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.209			0.209				0.313				0.313				0.313
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS: Unsignalized intersection.

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.000 **Δ*v/c* after mitigation:** 0.000

Significant impacted? NO **Fully mitigated?** N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Robertson Boulevard	Year of Count:	2016	Ambient Growth (%):	1	Conducted by:	RA	Date:	1/24/2017
24	East-West Street:	Exposition Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	RA	Project:	RA491

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	0
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 1 EB-- 0 WB-- 0	NB-- 0 SB-- 1 EB-- 0 WB-- 0	NB-- 0 SB-- 1 EB-- 0 WB-- 0	NB-- 0 SB-- 1 EB-- 0 WB-- 0	NB-- 0 SB-- 1 EB-- 0 WB-- 0
ATSAC-1 or ATSAC+ATCS-2?	0	0	0	0	0
Override Capacity	1200	1200	1200	1200	1200

	MOVEMENT	Existing Condition Volume	Existing Condition No. of Lanes	Existing Condition Lane Volume	Existing Plus Project Project Traffic	Existing Plus Project Total Volume	Existing Plus Project Lane Volume	Future Condition W/O Project Added Volume	Future Condition W/O Project Total Volume	Future Condition W/O Project No. of Lanes	Future Condition W/O Project Lane Volume	Future Condition W/ Project Project Traffic	Future Condition W/ Project Total Volume	Future Condition W/ Project No. of Lanes	Future Condition W/ Project Lane Volume	Future W/ Project W/ Mitigation Added Volume	Future W/ Project W/ Mitigation Total Volume	Future W/ Project W/ Mitigation No. of Lanes	Future W/ Project W/ Mitigation Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	431	1	**431**	0	431	**431**	77	517	1	**517**	0	517	1	**517**	0	517	1	**517**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	62	1	0	0	62	0	0	63	1	0	0	63	1	0	0	63	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	66	1	**66**	0	66	**66**	0	67	1	**67**	0	67	1	**67**	0	67	1	**67**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		431	North-South:		431	North-South:			517	North-South:			517	North-South:			517
		East-West:		66	East-West:		66	East-West:			67	East-West:			67	East-West:			67
		SUM:		497	SUM:		497	SUM:			584	SUM:			584	SUM:			584
	VOLUME/CAPACITY (V/C) RATIO:			0.414			0.414				0.487				0.487				0.487
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.414			0.414				0.487				0.487				0.487
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS: Unsignalized intersection.

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.000 **Δ*v/c* after mitigation:** 0.000

Significant impacted? NO **Fully mitigated?** N/A

HCS 2010 Two-Way Stop Control Summary Report

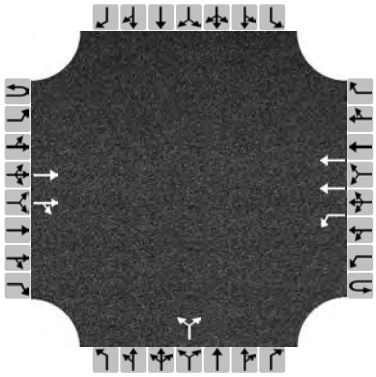
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	3/29/2016
Analysis Year	2016
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Existing 2016

Site Information

Intersection	Wesley & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Wesley St
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			709	20		11	1555			2		5				
Percent Heavy Vehicles						3				3		3				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						13					8					
Capacity						786					217					
v/c Ratio						0.02					0.04					
95% Queue Length						0.1					0.1					
Control Delay (s/veh)						9.7					22.3					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					0.1				22.3							
Approach LOS									C							

Copyright © 2016 University of Florida. All Rights Reserved.

HCS 2010 Two-Way Stop Control Summary Report

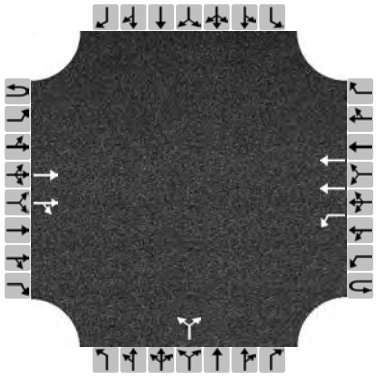
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	3/29/2016
Analysis Year	2016
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Existing (2016)

Site Information

Intersection	Wesley & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Wesley St
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			1359	3		5	1013			7		10				
Percent Heavy Vehicles						3				3		3				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						5					19					
Capacity						452					99					
v/c Ratio						0.01					0.19					
95% Queue Length						0.0					0.7					
Control Delay (s/veh)						13.0					49.7					
Level of Service (LOS)						B					E					
Approach Delay (s/veh)					0.1				49.7							
Approach LOS									E							

Copyright © 2016 University of Florida. All Rights Reserved.

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 25
North/South Street: WESLEY STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) CONDITIONS

Thru Lane:	1200 vph	N-S Split Phase :	N
Left-Turn Lane:	1200 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.006 *
	LT	0.00	0	0	0.000	E-W(1):	0.313
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.648 *
	TH	2.00	1,555	2,400	0.648 *		
	LT	1.00	11	1,200	0.009	V/C:	0.654
Northbound	RT	0.71	5	857	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	0.000
	LT	0.29	2	343	0.006 *		
Eastbound	RT	0.00	20	0	0.000	ICU:	0.754
	TH	2.00	709	2,400	0.304		
	LT	0.00	0	0	0.000 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.007
	TH	0.00	0	0	0.000 *	N-S(2):	0.014 *
	LT	0.00	0	0	0.000	E-W(1):	0.572 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.422
	TH	2.00	1,013	2,400	0.422		
	LT	1.00	5	1,200	0.004 *	V/C:	0.586
Northbound	RT	0.59	10	706	0.007	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	0.000
	LT	0.41	7	494	0.014 *		
Eastbound	RT	0.00	3	0	0.000	ICU:	0.686
	TH	2.00	1,359	2,400	0.568 *		
	LT	0.00	0	0	0.000	LOS:	B

Unsignalized intersection.
* = Critical Movement

HCS 2010 Two-Way Stop Control Summary Report

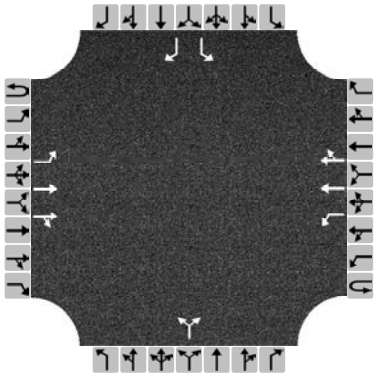
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	4/29/2016
Analysis Year	2016
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Existing + Project

Site Information

Intersection	Wesley & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Wesley St
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	0	0		1	0	1
Configuration		L	T	TR		L	T	TR			LR			L		R
Volume (veh/h)		0	712	20		11	1570	0		2		5		0		0
Percent Heavy Vehicles		3				3				3		3		3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						13					8					
Capacity		333				784					214			23		279
v/c Ratio						0.02					0.04					
95% Queue Length						0.1					0.1					
Control Delay (s/veh)		15.8				9.7					22.5			162.6		17.9
Level of Service (LOS)		C				A					C			F		C
Approach Delay (s/veh)					0.1				22.5							
Approach LOS									C							

Copyright © 2017 University of Florida. All Rights Reserved.

HCS 2010 Two-Way Stop Control Summary Report

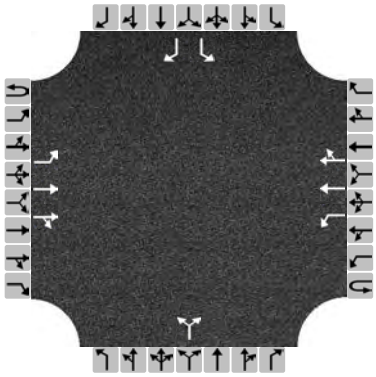
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	4/29/2016
Analysis Year	2016
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Existing + Project

Site Information

Intersection	Wesley & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Wesley St
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	0	0		1	0	1
Configuration		L	T	TR		L	T	TR			LR			L		R
Volume (veh/h)		0	1375	3		5	1019	0		7		10		0		0
Percent Heavy Vehicles		3				3				3		3		3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						5					19					
Capacity		627				446					96			46		478
v/c Ratio						0.01					0.20					
95% Queue Length						0.0					0.7					
Control Delay (s/veh)		10.7				13.2					51.4			83.5		12.5
Level of Service (LOS)		B				B					F			F		B
Approach Delay (s/veh)					0.1				51.4							
Approach LOS									F							

Copyright © 2016 University of Florida. All Rights Reserved.

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 25
North/South Street: WESLEY STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1200 vph	N-S Split Phase :	N
Left-Turn Lane:	1200 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.000
	TH	0.00	0	0	0.000 *	N-S(2):	0.006 *
	LT	0.00	0	0	0.000	E-W(1):	0.314
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.654 *
	TH	2.00	1,570	2,400	0.654 *		
	LT	1.00	11	1,200	0.009	V/C:	0.660
Northbound	RT	0.71	5	857	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	0.000
	LT	0.29	2	343	0.006 *		
Eastbound	RT	0.00	20	0	0.000	ICU:	0.760
	TH	2.00	712	2,400	0.305		
	LT	0.00	0	0	0.000 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.007
	TH	0.00	0	0	0.000 *	N-S(2):	0.014 *
	LT	0.00	0	0	0.000	E-W(1):	0.578 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.425
	TH	2.00	1,019	2,400	0.425		
	LT	1.00	5	1,200	0.004 *	V/C:	0.592
Northbound	RT	0.59	10	706	0.007	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	0.000
	LT	0.41	7	494	0.014 *		
Eastbound	RT	0.00	3	0	0.000	ICU:	0.692
	TH	2.00	1,375	2,400	0.574 *		
	LT	0.00	0	0	0.000	LOS:	B

Unsignalized intersection.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 25
North/South Street: WESLEY STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	0	1,600	0.000	N-S(1):	0.034 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	0	1,600	0.000 *	E-W(1):	0.289
Westbound	RT	0.00	34	0	0.000	E-W(2):	0.594 *
	TH	2.00	1,689	3,200	0.538 *		
	LT	1.00	33	1,600	0.021	V/C:	0.628
Northbound	RT	0.33	18	524	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.67	37	1,076	0.034 *		
Eastbound	RT	0.00	47	0	0.000	ICU:	0.658
	TH	2.00	811	3,200	0.268		
	LT	1.00	89	1,600	0.056 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	71	1,600	0.044 *	N-S(1):	0.102 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	21	1,600	0.013	E-W(1):	0.533 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.350
	TH	2.00	1,121	3,200	0.350		
	LT	1.00	50	1,600	0.031 *	V/C:	0.635
Northbound	RT	0.39	36	619	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.61	57	981	0.058 *		
Eastbound	RT	0.00	45	0	0.000	ICU:	0.665
	TH	2.00	1,560	3,200	0.502 *		
	LT	1.00	0	1,600	0.000	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 25
North/South Street: WESLEY STREET
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	0	1,600	0.000	N-S(1):	0.034 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	0	1,600	0.000 *	E-W(1):	0.290
Westbound	RT	0.00	34	0	0.000	E-W(2):	0.599 *
	TH	2.00	1,704	3,200	0.543 *		
	LT	1.00	33	1,600	0.021	V/C:	0.633
Northbound	RT	0.33	18	524	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.67	37	1,076	0.034 *		
Eastbound	RT	0.00	47	0	0.000	ICU:	0.663
	TH	2.00	814	3,200	0.269		
	LT	1.00	89	1,600	0.056 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	71	1,600	0.044 *	N-S(1):	0.102 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	1.00	21	1,600	0.013	E-W(1):	0.538 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.352
	TH	2.00	1,127	3,200	0.352		
	LT	1.00	50	1,600	0.031 *	V/C:	0.640
Northbound	RT	0.39	36	619	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ATSAC:	-0.070
	LT	0.61	57	981	0.058 *		
Eastbound	RT	0.00	45	0	0.000	ICU:	0.670
	TH	2.00	1,576	3,200	0.507 *		
	LT	1.00	0	1,600	0.000	LOS:	B

Traffic signals in Culver City have advanced traffic signal synchronization equivalent to ATSAC.
* = Critical Movement

HCS 2010 Two-Way Stop Control Summary Report

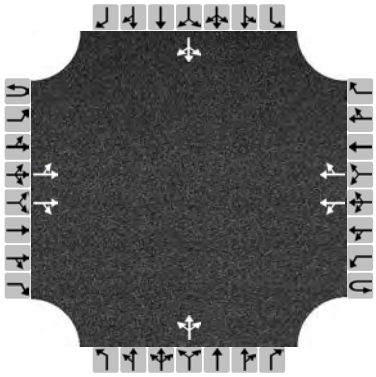
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	3/29/2016
Analysis Year	2016
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Existing 2016

Site Information

Intersection	Cattaraugus & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Cattaraugus Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		42	713	11		14	1357	360		3	9	8		52	2	68
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		420				729					20				129	
Capacity		333				839					47				137	
v/c Ratio		1.26				0.87					0.43				0.94	
95% Queue Length		0.5				0.1					1.5				6.5	
Control Delay (s/veh)		17.5				9.4					130.7				124.5	
Level of Service (LOS)		C				A					F				F	
Approach Delay (s/veh)	2.6								130.7				124.5			
Approach LOS									F				F			

Copyright © 2016 University of Florida. All Rights Reserved.

HCS 2010 Two-Way Stop Control Summary Report

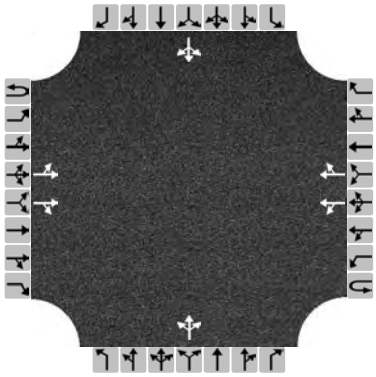
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	3/29/2016
Analysis Year	2016
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Existing 2016

Site Information

Intersection	Cattaraugus & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Cattaraugus Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		38	1205	23		7	683	53		5	0	4		94	2	54
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		654				356					9				153	
Capacity		848				546					167				243	
v/c Ratio		0.77				0.65					0.05				0.63	
95% Queue Length		0.1				0.0					0.2				3.8	
Control Delay (s/veh)		9.5				11.7					27.8				41.9	
Level of Service (LOS)		A				B					D				E	
Approach Delay (s/veh)	0.9				0.2				27.8				41.9			
Approach LOS									D				E			

Copyright © 2016 University of Florida. All Rights Reserved.

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 26
North/South Street: CATTARAUGUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) CONDITIONS

Thru Lane:	1200 vph	N-S Split Phase :	N
Left-Turn Lane:	1200 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.060
	TH	1.00	2	1,200	0.102 *	N-S(2):	0.105 *
	LT	0.00	52	1,200	0.043	E-W(1):	0.331
Westbound	RT	0.00	360	0	0.000	E-W(2):	0.756 *
	TH	2.00	1,357	2,400	0.721 *		
	LT	0.00	14	1,200	0.012	V/C:	0.861
Northbound	RT	0.00	8	0	0.000	Lost Time:	0.100
	TH	1.00	9	1,200	0.017	ATSAC:	0.000
	LT	0.00	3	1,200	0.003 *		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.961
	TH	2.00	713	2,400	0.319		
	LT	0.00	42	1,200	0.035 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	54	0	0.000	N-S(1):	0.086
	TH	1.00	2	1,200	0.125 *	N-S(2):	0.129 *
	LT	0.00	94	1,200	0.078	E-W(1):	0.534 *
Westbound	RT	0.00	53	0	0.000	E-W(2):	0.342
	TH	2.00	683	2,400	0.310		
	LT	0.00	7	1,200	0.006 *	V/C:	0.663
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,200	0.008	ATSAC:	0.000
	LT	0.00	5	1,200	0.004 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.763
	TH	2.00	1,205	2,400	0.528 *		
	LT	0.00	38	1,200	0.032	LOS:	C

Unsignalized intersection.
* = Critical Movement

HCS 2010 Two-Way Stop Control Summary Report

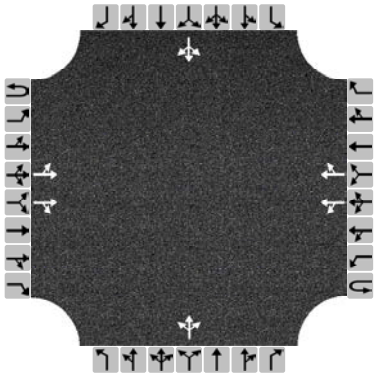
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	4/29/2016
Analysis Year	2016
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Existing + Project

Site Information

Intersection	Cattaraugus & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Cattaraugus Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		42	716	11		14	1372	360		3	9	8		52	2	68
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

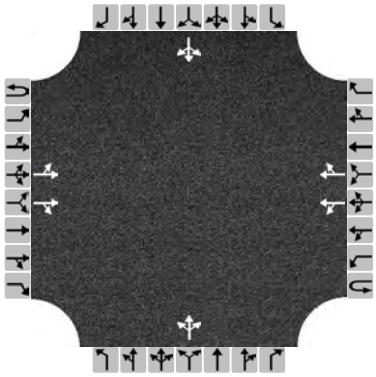
Flow Rate (veh/h)		421				737					20				129	
Capacity		328				837					43				129	
v/c Ratio		1.28				0.88					0.46				1.00	
95% Queue Length		0.5				0.1					1.6				6.9	
Control Delay (s/veh)		17.7				9.4					145.9				143.8	
Level of Service (LOS)		C				A					F				F	
Approach Delay (s/veh)	2.7								145.9				143.8			
Approach LOS									F				F			

Copyright © 2017 University of Florida. All Rights Reserved.

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	Raju Associates	Intersection	Cattaraugus & Washington
Agency/Co.		Jurisdiction	Culver City
Date Performed	4/29/2016	East/West Street	Washington Bl
Analysis Year	2016	North/South Street	Cattaraugus Ave
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Existing + Project		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		38	1221	23		7	689	53		5	0	4		94	2	54
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		662				359					9				153	
Capacity		843				538					163				239	
v/c Ratio		0.78				0.67					0.06				0.64	
95% Queue Length		0.1				0.0					0.2				3.9	
Control Delay (s/veh)		9.5				11.8					28.4				43.4	
Level of Service (LOS)		A				B					D				E	
Approach Delay (s/veh)	1.0				0.2				28.4				43.4			
Approach LOS									D				E			

Copyright © 2016 University of Florida. All Rights Reserved.

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 26
North/South Street: CATTARAUGUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: EXISTING (2016) PLUS PROJECT CONDITIONS

Thru Lane:	1200 vph	N-S Split Phase :	N
Left-Turn Lane:	1200 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.060
	TH	1.00	2	1,200	0.102 *	N-S(2):	0.105 *
	LT	0.00	52	1,200	0.043	E-W(1):	0.332
Westbound	RT	0.00	360	0	0.000	E-W(2):	0.763 *
	TH	2.00	1,372	2,400	0.728 *		
	LT	0.00	14	1,200	0.012	V/C:	0.868
Northbound	RT	0.00	8	0	0.000	Lost Time:	0.100
	TH	1.00	9	1,200	0.017	ATSAC:	0.000
	LT	0.00	3	1,200	0.003 *		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.968
	TH	2.00	716	2,400	0.320		
	LT	0.00	42	1,200	0.035 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	54	0	0.000	N-S(1):	0.086
	TH	1.00	2	1,200	0.125 *	N-S(2):	0.129 *
	LT	0.00	94	1,200	0.078	E-W(1):	0.540 *
Westbound	RT	0.00	53	0	0.000	E-W(2):	0.344
	TH	2.00	689	2,400	0.312		
	LT	0.00	7	1,200	0.006 *	V/C:	0.669
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,200	0.008	ATSAC:	0.000
	LT	0.00	5	1,200	0.004 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.769
	TH	2.00	1,221	2,400	0.534 *		
	LT	0.00	38	1,200	0.032	LOS:	C

Unsignalized intersection.
* = Critical Movement

HCS 2010 Two-Way Stop Control Summary Report

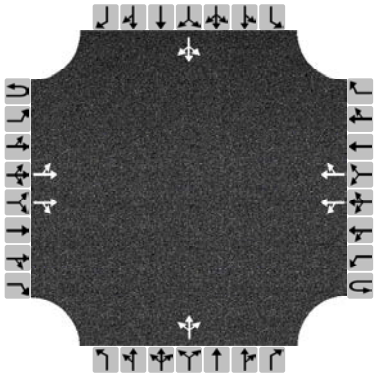
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	1/24/2017
Analysis Year	2018
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Cumulative Base

Site Information

Intersection	Cattaraugus & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Cattaraugus Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		71	799	11		14	1530	367		3	9	8		53	2	82
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		496				821					20				144	
Capacity		280				776					15					
v/c Ratio		1.77				1.06					1.35					
95% Queue Length		1.1				0.1					3.1					
Control Delay (s/veh)		22.5				9.7					719.3					
Level of Service (LOS)		C				A					F					
Approach Delay (s/veh)	6.2								719.3							
Approach LOS									F							

Copyright © 2017 University of Florida. All Rights Reserved.

HCS 2010 Two-Way Stop Control Summary Report

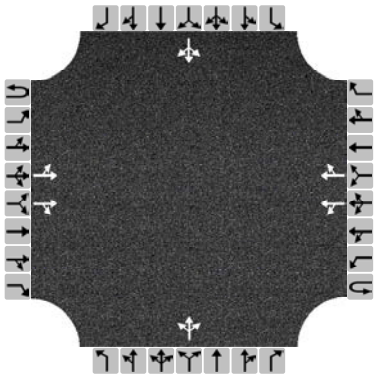
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	1/24/2017
Analysis Year	2018
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Cumulative Base

Site Information

Intersection	Cattaraugus & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Cattaraugus Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		88	1401	23		7	811	54		5	0	4		96	2	68
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		805				421					9				169	
Capacity		756				457					57				108	
v/c Ratio		1.07				0.92					0.16				1.56	
95% Queue Length		0.4				0.0					0.5				12.6	
Control Delay (s/veh)		10.4				13.0					79.8				362.8	
Level of Service (LOS)		B				B					F				F	
Approach Delay (s/veh)	3.3				0.3				79.8				362.8			
Approach LOS									F				F			

Copyright © 2017 University of Florida. All Rights Reserved.

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 26
North/South Street: CATTARAUGUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) BASE CONDITIONS

Thru Lane:	1200 vph	N-S Split Phase :	N
Left-Turn Lane:	1200 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.061
	TH	1.00	2	1,200	0.114 *	N-S(2):	0.117 *
	LT	0.00	53	1,200	0.044	E-W(1):	0.379
Westbound	RT	0.00	367	0	0.000	E-W(2):	0.855 *
	TH	2.00	1,530	2,400	0.796 *		
	LT	0.00	14	1,200	0.012	V/C:	0.972
Northbound	RT	0.00	8	0	0.000	Lost Time:	0.100
	TH	1.00	9	1,200	0.017	ATSAC:	0.000
	LT	0.00	3	1,200	0.003 *		
Eastbound	RT	0.00	11	0	0.000	ICU:	1.072
	TH	2.00	799	2,400	0.367		
	LT	0.00	71	1,200	0.059 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.088
	TH	1.00	2	1,200	0.138 *	N-S(2):	0.142 *
	LT	0.00	96	1,200	0.080	E-W(1):	0.636 *
Westbound	RT	0.00	54	0	0.000	E-W(2):	0.436
	TH	2.00	811	2,400	0.363		
	LT	0.00	7	1,200	0.006 *	V/C:	0.778
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,200	0.008	ATSAC:	0.000
	LT	0.00	5	1,200	0.004 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.878
	TH	2.00	1,401	2,400	0.630 *		
	LT	0.00	88	1,200	0.073	LOS:	D

Unsignalized intersection.
* = Critical Movement

HCS 2010 Two-Way Stop Control Summary Report

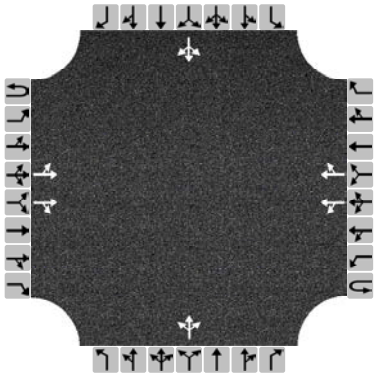
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	1/24/2017
Analysis Year	2018
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Cumulative + Project

Site Information

Intersection	Cattaraugus & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Cattaraugus Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		71	802	11		14	1545	367		3	9	8		53	2	82
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		497				828					20				144	
Capacity		276				774					14					
v/c Ratio		1.80				1.07					1.42					
95% Queue Length		1.1				0.1					3.1					
Control Delay (s/veh)		22.8				9.7					770.3					
Level of Service (LOS)		C				A					F					
Approach Delay (s/veh)	6.4								770.3							
Approach LOS									F							

Copyright © 2017 University of Florida. All Rights Reserved.

HCS 2010 Two-Way Stop Control Summary Report

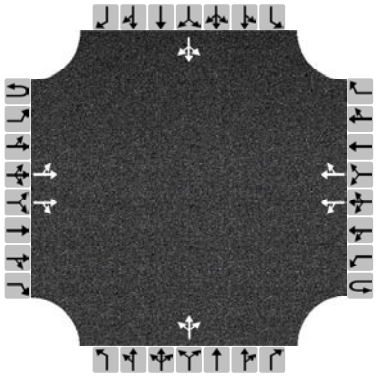
General Information

Analyst	Raju Associates
Agency/Co.	
Date Performed	1/24/2017
Analysis Year	2018
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Cumulative + Project

Site Information

Intersection	Cattaraugus & Washington
Jurisdiction	Culver City
East/West Street	Washington Bl
North/South Street	Cattaraugus Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	1	0		0	1	0
Configuration		LT		TR		LT		TR			LTR				LTR	
Volume (veh/h)		88	1417	23		7	817	54		5	0	4		96	2	68
Percent Heavy Vehicles		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		813				424					9				169	
Capacity		752				450					51				99	
v/c Ratio		1.08				0.94					0.18				1.71	
95% Queue Length		0.4				0.0					0.6				13.5	
Control Delay (s/veh)		10.4				13.1					90.0				433.8	
Level of Service (LOS)		B				B					F				F	
Approach Delay (s/veh)	3.4				0.3				90.0				433.8			
Approach LOS									F				F			

Copyright © 2017 University of Florida. All Rights Reserved.

Project: 8888 WASHINGTON BOULEVARD MIXED-USE PROJECT
INT # 26
North/South Street: CATTARAUGUS AVENUE
East/West Street: WASHINGTON BOULEVARD

Scenario: CUMULATIVE (2018) PLUS PROJECT CONDITIONS

Thru Lane:	1200 vph	N-S Split Phase :	N
Left-Turn Lane:	1200 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle):	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.061
	TH	1.00	2	1,200	0.114 *	N-S(2):	0.117 *
	LT	0.00	53	1,200	0.044	E-W(1):	0.380
Westbound	RT	0.00	367	0	0.000	E-W(2):	0.862 *
	TH	2.00	1,545	2,400	0.803 *		
	LT	0.00	14	1,200	0.012	V/C:	0.979
Northbound	RT	0.00	8	0	0.000	Lost Time:	0.100
	TH	1.00	9	1,200	0.017	ATSAC:	0.000
	LT	0.00	3	1,200	0.003 *		
Eastbound	RT	0.00	11	0	0.000	ICU:	1.079
	TH	2.00	802	2,400	0.368		
	LT	0.00	71	1,200	0.059 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.088
	TH	1.00	2	1,200	0.138 *	N-S(2):	0.142 *
	LT	0.00	96	1,200	0.080	E-W(1):	0.643 *
Westbound	RT	0.00	54	0	0.000	E-W(2):	0.439
	TH	2.00	817	2,400	0.366		
	LT	0.00	7	1,200	0.006 *	V/C:	0.785
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,200	0.008	ATSAC:	0.000
	LT	0.00	5	1,200	0.004 *		
Eastbound	RT	0.00	23	0	0.000	ICU:	0.885
	TH	2.00	1,417	2,400	0.637 *		
	LT	0.00	88	1,200	0.073	LOS:	D

Unsignalized intersection.
* = Critical Movement

APPENDIX E

Queuing Analysis

RAJU Associates, Inc.

505 E.Colorado Blvd.
Suite 202
Pasadena, CA 91101
Voice: (626) 792-2700
Fax: (626) 792-2772

TECHNICAL MEMORANDUM

TO: Ms. Susan Yun, City of Culver City
CC: Mr. Barry Kurtz, City of Culver City

FROM: Srinath Raju, P.E
Chris Munoz

SUBJECT: 8888 Washington Boulevard Project Traffic Study
Queueing Analysis at Project Driveway

DATE: February 19, 2017 **REF:** RA491

This memorandum provides a brief description of queueing analysis at the project driveway along Washington Boulevard taking into consideration the automated parking facility and associated infrastructure provided to support the same. The intent of this analysis is to determine the potential, if any, for arriving traffic to queue up within the site and spill over to Washington Boulevard and consequently affect the traffic flow along Washington Boulevard during peak time periods.

Automated Parking Facility Background Information

A preliminary Parking Operations Plan for the automated parking facility proposed for the Project on-site, has been prepared. Per the parking facility's automated system specifications, the retrieval rate at the proposed facility would range between 65 seconds per vehicle to 150 seconds per vehicle. The retrieval rate is the speed of the system and does not include the time associated with loading, unloading, etc. that would comprise of the overall processing rate.

The processing rate is dependent primarily upon the vertical and horizontal distance a vehicle has to be transported to and from its parking space, whether the space is a tandem space or not, etc. The (non-tandem) spaces closest to the elevator shaft take the least amount of time to process

while those spaces farthest from the elevator shaft take the most amount of time to process. This fact is demonstrated in the Exhibit 1 (also provided in the Parking Operations Plan). Based on the exhibits in the Parking Operations Plan, a processing rate of 90 seconds per vehicle is estimated by the parking operator (CityLift) to be available in the automated parking structure for approximately 50 spaces per level (total of 150 spaces).

Project Driveway Volumes

The proposed Project's trip generation is provided in Table E-0. From Table E-0, it can be observed that the driveway traffic volumes at the Project Site can be calculated aggregating the inbound traffic generation for each of the three component uses of the proposed Project and then crediting the same for transit trips and internal trip capture. Based on the forecasts developed for the proposed Project, the driveway volumes at the site is estimated to be 102 trips inbound during the morning peak hour.

Queueing Analysis Methodology

The methodology for queueing analysis involves the following key elements:

- Compile traffic counts conducted at three office sites within the City of Culver City on numerous days including the observed traffic at the driveways to the three sites in 15-minute time intervals
- Determine the 15-minute inbound % traffic at each site for all four days based on the observed overall inbound traffic flows during the AM peak hours and identify the maximum 15-minute inbound % traffic among all these data points
- Determine the estimated AM peak hour driveway volumes inbound at the proposed Project site
- Determine the maximum 15-minute traffic volumes at the proposed Project site using the observed maximum 15-minute inbound % from the various office sites in Culver City and the estimated AM peak hour driveway volumes at the proposed Project site
- Calculate the average queue length in the peak 15-minute period during the AM peak hour when inbound traffic would be maximum, based on the processing rate at the proposed automated parking facility

- Compare this average queue length (in number of vehicles) during the peak 15-minute time period to the available storage on site including queue storage and short-term loading spaces provided and determine if the queue length exceeds the queue storage

Queueing Analysis

A queueing analysis of trips inbound to the Project Site during the morning peak hour when maximum number of inbound vehicular traffic is anticipated, was conducted using the methodology noted above to assess the potential of vehicles queueing in the driveway aisle within the Project Site beyond the access driveway and spilling over on to the external street system (Washington Boulevard).

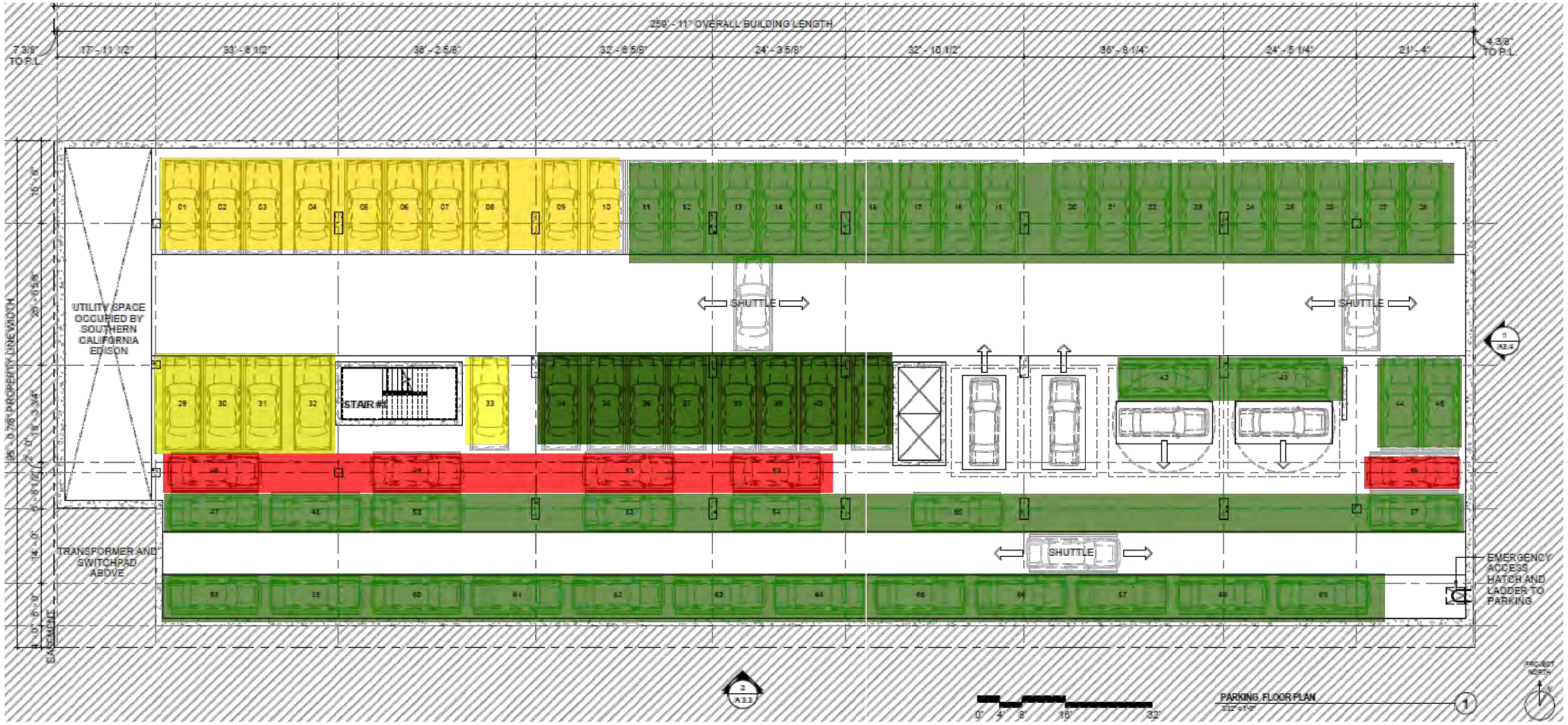
Table E-1 summarizes the analysis of inbound traffic within the AM peak hours to determine the average 15-minute arrival %, 90th-percentile 15-minute arrival % and the maximum 15-minute arrival %. It can be observed that the average 15-minute arrival % is 32%, 90th percentile 15-minute arrival % is 36.1%, and the maximum 15-minute arrival % is 41%. For the purposes of this queueing analysis, the maximum 15-minute arrival % of 41% has been chosen.

Table E-2 details the maximum queueing analysis at the Project driveway. This table provides the total inbound traffic at the proposed Project driveway during the AM peak hour, the maximum estimated number of proposed Project arrivals in the peak 15-minute interval, service volume processed in the automated parking facility's four elevators, average queue length in the maximum 15-minute period in number of vehicles, available storage on site and whether the queue length would be such that it would extend to Washington Boulevard.

Based on the queueing analysis, it can be observed that during the peak times of the morning peak hour, a maximum total of 42 vehicles would arrive within a peak 15-minute period. Based on the parking operator's estimated processing rate of the system (including all-day valet services) of 90 seconds per vehicle, a total of 40 vehicles within the same time period can be processed by the system with all four operating vehicular elevators. A maximum queue of 2 vehicles would remain on site. The maximum available storage on-site, based on the Site Plan, is 10 vehicles in the queue plus four (4) short-term loading spaces and one (1) ADA parking space. Therefore,

there would not be any queueing vehicles that would extend beyond the site on to the external roadway system (Washington Boulevard) assuming the maximum peaking characteristics of the arriving vehicles in the morning peak hour. Consequently, the traffic flow along Washington Boulevard would not be affected by inbound vehicles extending out of the Project driveway.

Per City of Culver City's request, a queueing analysis with three of the four parking elevators being available during the morning peak conditions was conducted. With the estimated processed rate of the system (with 3 of the 4 elevators available) with all day valet services at 90 seconds per vehicle, a total of 30 vehicles (3600 / 4 (in 15-minutes) / 90 seconds per vehicle * 3 elevators) can be processed by the system within the same peak 15-minute interval. Using a maximum arrival of a total of 42 vehicles within the peak 15-minute period, a maximum queue of 12 vehicles is anticipated. Again, the maximum available storage on-site, based on the Site Plan, is 10 vehicles in the storage lane on site plus four (4) short-term loading spaces and one (1) ADA parking space for a total of 14 to 15 vehicles that can be stored on site. Therefore, there would still not be any queueing vehicles that would extend beyond the site on to the external roadway system (Washington Boulevard) assuming the maximum peaking characteristics of the arriving vehicles in the morning peak hour and 3 of the 4 parking elevators available during that same time period. Consequently, the traffic flow along Washington Boulevard would not be affected by inbound vehicles extending out of the Project driveway even with 3 of the 4 parking elevators available during the peak time period in the AM peak hour.



LEGEND:

- 65-90 seconds/vehicle retrieval rate
- 90-120 seconds/vehicle retrieval rate
- 120-150 seconds/vehicle retrieval rate

Not to scale

EXHIBIT 1
DISTRIBUTION OF PARKING SPACES BASED ON SERVICE RATE

RAJU Associates, Inc.

TABLE E-0
ESTIMATED PROJECT TRIP GENERATION

	Size	Daily	AM Peak Hour IN	AM Peak Hour OUT	AM Peak Hour TOTAL	PM Peak Hour IN	PM Peak Hour OUT	PM Peak Hour TOTAL
Proposed Project								
Office	59,325 s.f.	883	111	15	126	25	120	145
	Transit Trip Use (25%)	(221)	(28)	(4)	(32)	(6)	(30)	(36)
	*Internal Capture (10%) Trip Credit	(66)	(8)	(1)	(9)	(2)	(9)	(11)
Retail	2,878 s.f.	677	11	7	18	27	29	56
	Internal Capture (10%) Trip Credit	(68)	(1)	(1)	(2)	(3)	(3)	(6)
	**Pass-By Trip Reduction (25%)	(152)	(3)	(1)	(4)	(6)	(7)	(13)
High-Turnover Restaurant	3,184 s.f.	405	19	15	34	19	12	31
	Internal Capture (10%) Trip Credit	(41)	(2)	(1)	(3)	(2)	(1)	(3)
	**Pass-By Trip Reduction (25%)	(91)	(4)	(4)	(8)	(4)	(3)	(7)
Existing Uses (to be removed)								
Auto Repair Shop	9,992 s.f.	200	15	7	22	17	19	36
	Pass-By Trip Reduction (10%)	(20)	(2)	0	(2)	(2)	(2)	(4)
	Project Net Trip Generation Total	**1,146**	**82**	**18**	**100**	**33**	**91**	**124**
Trip Generation Rates [1]								
Office (ITE Land Use 710)	Trips per 1,000 s.f.	[2]	88%	12%	[2]	17%	83%	[2]
Retail/Shopping Center (ITE Land Use 820)	Trips per 1,000 s.f.	[3]	62%	38%	[3]	48%	52%	[3]
High-Turnover Restaurant (ITE Land Use 932)	Trips per 1,000 s.f.	127.15	55%	45%	10.81	60%	40%	9.85
Automobile Care Center (ITE Land Use 942)	Trips per 1,000 s.f.	20.00 [4]	66%	34%	2.25	48%	52%	[5]

* Internal capture trips determined after reduction of transit trips.

** Pass-by trips determined after reduction of internal capture trip credit.

[1] Trip generation rates from *Trip Generation Manual* , 9th Edition, ITE 2012, unless otherwise noted.

[2] Trip generation for office was calculated using the following equations:

Daily:	Ln(T) = 0.76 Ln(X) + 3.68	Where:
AM Peak Hour:	Ln(T) = 0.80 Ln(X) + 1.57	Ln = Natural logarithm
PM Peak Hour:	T = 1.12 (X) + 78.45	T = Two-way volume of traffic (total trip-ends)
		X = Area in 1,000 square feet gross floor area

[3] Trip generation for retail/shopping center was calculated using the following equations:

		Where:
Daily:	Ln(T) = 0.65 Ln(X) + 5.83	Ln = Natural logarithm
AM Peak Hour:	Ln(T) = 0.61 Ln(X) + 2.24	T = Two-way volume of traffic (total trip-ends)
PM Peak Hour:	Ln(T) = 0.67 Ln(X) + 3.31	X = 1,000 square feet gross leasable area

[4] ITE does not provide a daily trip generation rate for this use. Therefore, the daily trip rate for this use from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* , SANDAG, April 2002 was utilized.

[5] PM trip generation for automobile care center was calculated using the following equation:

		Where:
PM Peak Hour:	T = 2.41 (X) + 11.79	T = Two-way volume of traffic (total trip-ends)
		X = 1,000 square feet occupied gross leasable area

TABLE E-1
Determination of Peak 15-Minute Percents within AM Peak Hour Traffic

Site		Day 1			Day 2			Day 3			Day 4		
		Dwy 1	Dwy 2	Total	Dwy 1	Dwy 2	Total	Dwy 1	Dwy 2	Total	Dwy 1	Dwy 2	Total
Site 1	AM Peak Vols 15Minute	22	30	52	22	36	58	19	40	59	18	24	42
	AM Peak Vols Hourly	76	105	181	69	99	168	51	93	144	62	85	147
	15-min Peak % of Hourly	-	-	28.7%	-	-	34.5%	-	-	**41.0%**	-	-	28.6%
Site 2	AM Peak Vols 15Minute	17	-	17	33	-	33	30	-	30	17	-	17
	AM Peak Vols Hourly	50	-	50	103	-	103	99	-	99	58	-	58
	15-min Peak % of Hourly	-	-	34.0%	-	-	32.0%	-	-	30.3%	-	-	29.3%
Site 3	AM Peak Vols 15Minute	29	-	29	13	-	13	16	-	16	26	-	26
	AM Peak Vols Hourly	101	-	101	44	-	44	51	-	51	72	-	72
	15-min Peak % of Hourly	-	-	28.7%	-	-	29.5%	-	-	31.4%	-	-	36.1%

Sites 1, 2 and 3 were office buildings in Culver City where traffic counts at driveways were compiled from counts on 4 days

Analysis of Peak Demand Percents

Average 15-min Peak %	32.0%
90th Percentile Peak %	36.1%
Maximum 15-min Peak %	**41.0%**

Determination of 90th Percentile

	Rank	Peak%
	1	28.6%
	2	28.7%
	3	28.7%
	4	29.3%
	5	29.5%
	6	30.3%
	7	31.4%
	8	32.0%
	9	34.0%
	10	34.5%
90th Percentile →	11	36.1%
	12	41.0%

TABLE E-2
MAXIMUM QUEUEING ANALYSIS AT DRIVEWAY

1	Driveway Traffic of Proposed Project (AM Peak Hour Inbound) =	**102 trips**	[calculated using 111+11+19-28-1-2]
2	Maximum number of arrivals in peak 15-minute period =	[max 15-min % * Driveway Inbound AM Pk Hr Trips] = (0.41 * 102) **42** vehicles	
3	Service Volume of Automated Parking Facility's 4 Elevators = (at the rate of 90 seconds/vehicle per elevator for 15 minutes)	**40** vehicles	{using (15*60/90)*4}
4	Average Queue Length (2 - 3 above) in maximum 15-min period	**2** vehicles	
5	Available storage on site =	**15** vehicles {10 vehicles queue storage plus 5 loading spaces on site}	
6	Would Queue in maximum 15-minute period extend to Washington Boulevard?	**No**	

APPENDIX F

Expo-to-Downtown Bicycle Connector

EXPO-TO-DOWNTOWN
BICYCLE CONNECTOR

EXPO-TO-DOWNTOWN
BICYCLE CONNECTOR

CONTEXT

With the opening of the Expo Line, Culver City is experiencing a change in transportation and development patterns near the station area. The City is taking advantage of this opportunity by encouraging transit-oriented development and multimodal transportation options. These strategies will help existing and new residents and commuters move around our community more easily by walking, biking, and transit.

GOALS

IMPROVE SAFETY

provide a safe, family-friendly connection between the Expo Line, Expo Bike Path, and Downtown Culver City

PROMOTE MOBILITY

design streets for people of all ages and abilities to walk and bike comfortably

INCREASE ACCESS TO BUSINESSES

provide easy access to local destinations for residents and commuters

PROMOTE COMMUNITY HEALTH & SUSTAINABILITY

increase physical activity and reduce emissions

PROJECT OVERVIEW

The project team was tasked with developing a feasible way to provide a high-quality bikeway between the Expo Line Station and Downtown Culver City. The consultant team considered a range of bikeway types, ranging from sharrows to painted bike lanes to protected bike lanes. To provide a safe and comfortable experience, the project team is recommending a **two-way protected bike lane with signalized intersections.** Based on stakeholder input, the City could consider implementing only a portion of the recommended alternative that would achieve some of the project's objectives.

BIKEWAY CONSIDERATIONS

INSTALLATION COST	■
SAFETY	■
NEW RIDER ATTRACTION	■
FEW CONFLICT POINTS	■■■■■

INSTALLATION COST	■■
SAFETY	■■
NEW RIDER ATTRACTION	■■
FEW CONFLICT POINTS	■■■■

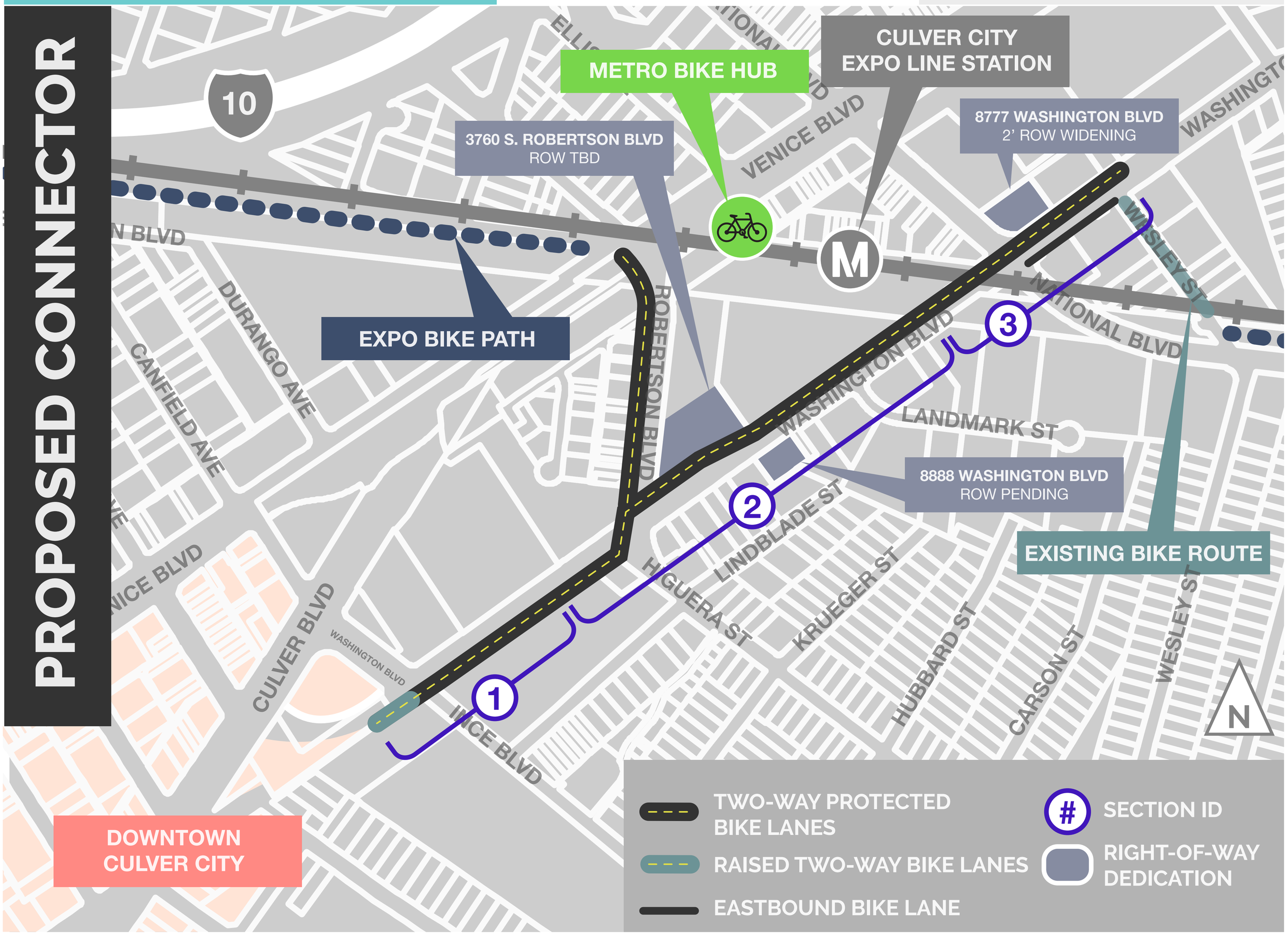
INSTALLATION COST	■■
SAFETY	■■
NEW RIDER ATTRACTION	■■■
FEW CONFLICT POINTS	■■■■

INSTALLATION COST	■■■■■
SAFETY	■■■■■
NEW RIDER ATTRACTION	■■■■
FEW CONFLICT POINTS	■■

INSTALLATION COST	■■■■
SAFETY	■■■■■
NEW RIDER ATTRACTION	■■■■■
FEW CONFLICT POINTS	■■■

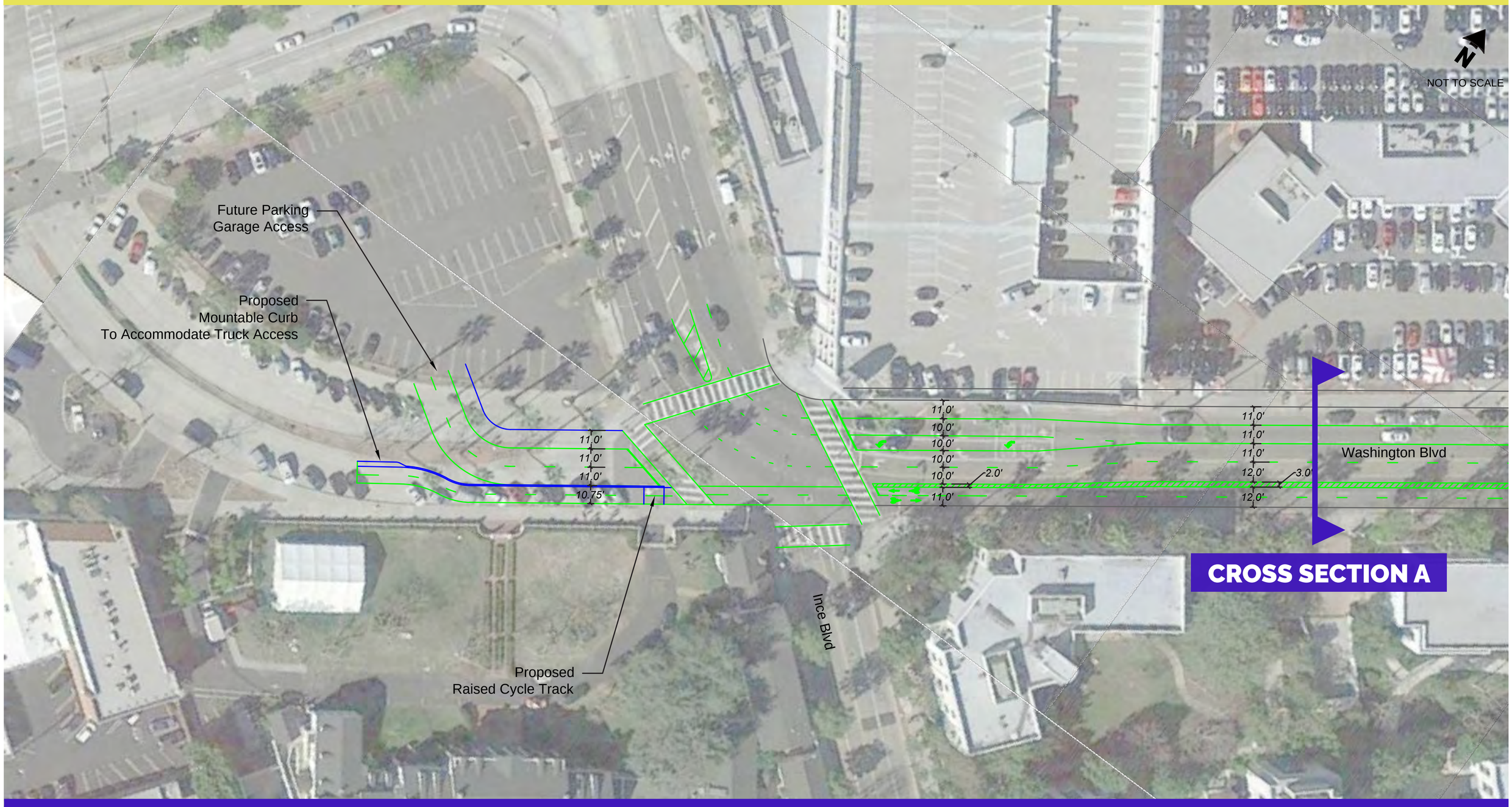
INSTALLATION COST	■■■■
SAFETY	■■■■■
NEW RIDER ATTRACTION	■■■■■
FEW CONFLICT POINTS	■■

PROPOSED CONNECTOR



1 WASHINGTON/INCE

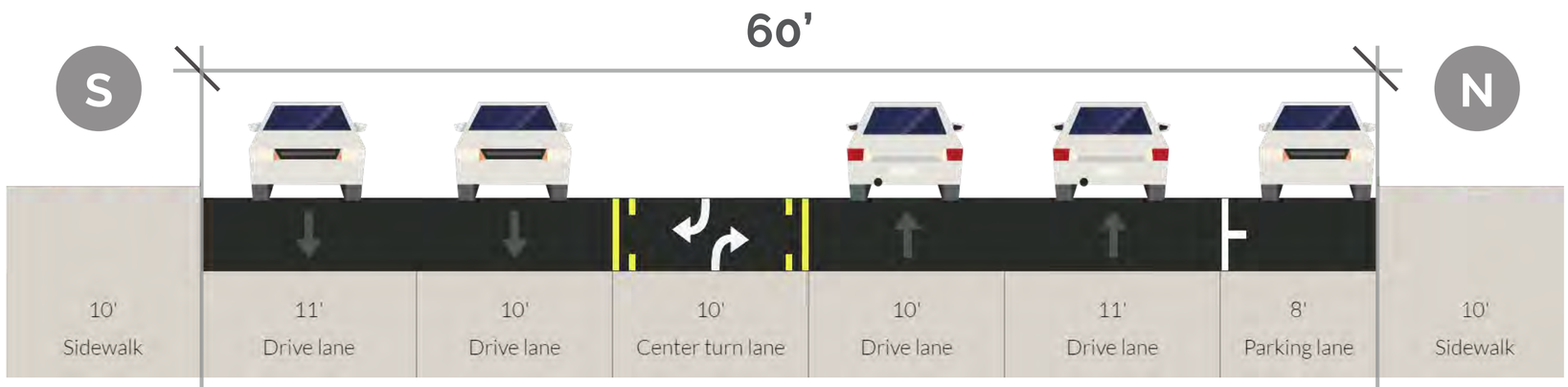
FEATURES:



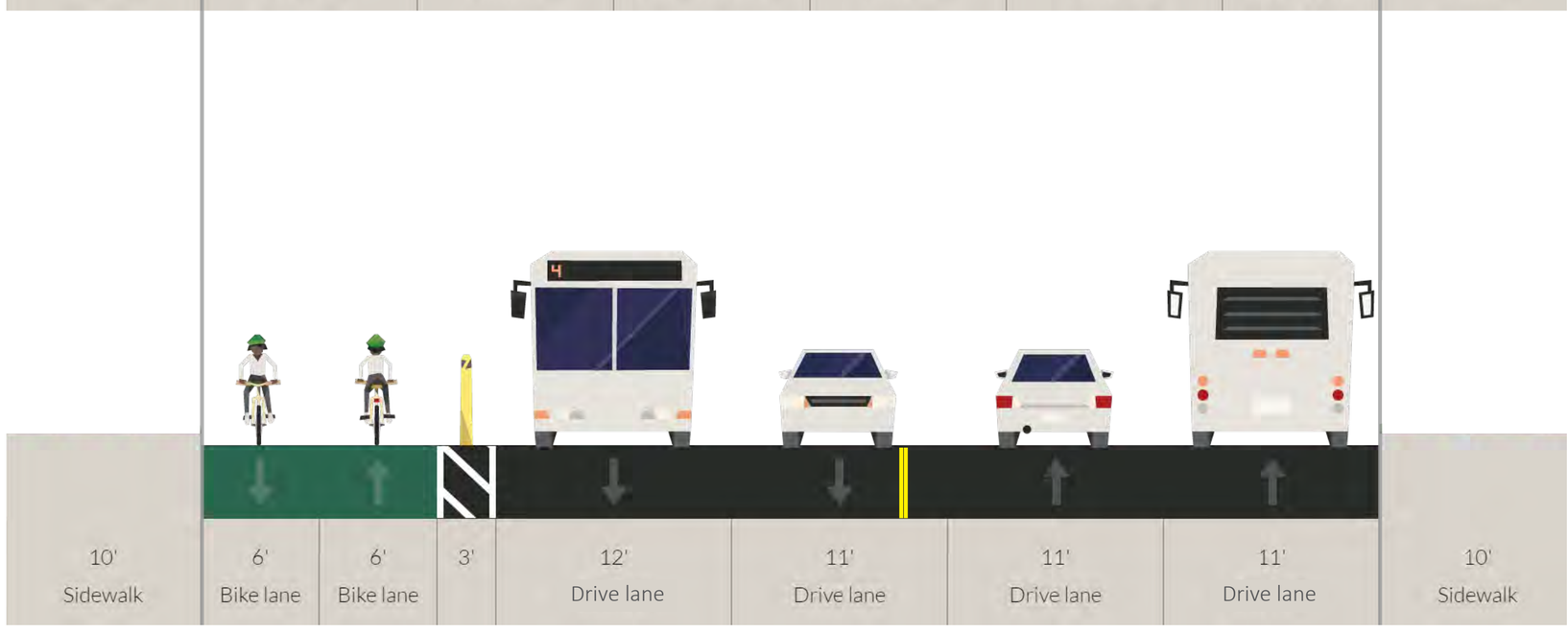
CROSS SECTION A

WASHINGTON BLVD
FROM INCE BLVD TO ROBERTSON BLVD

EXISTING:

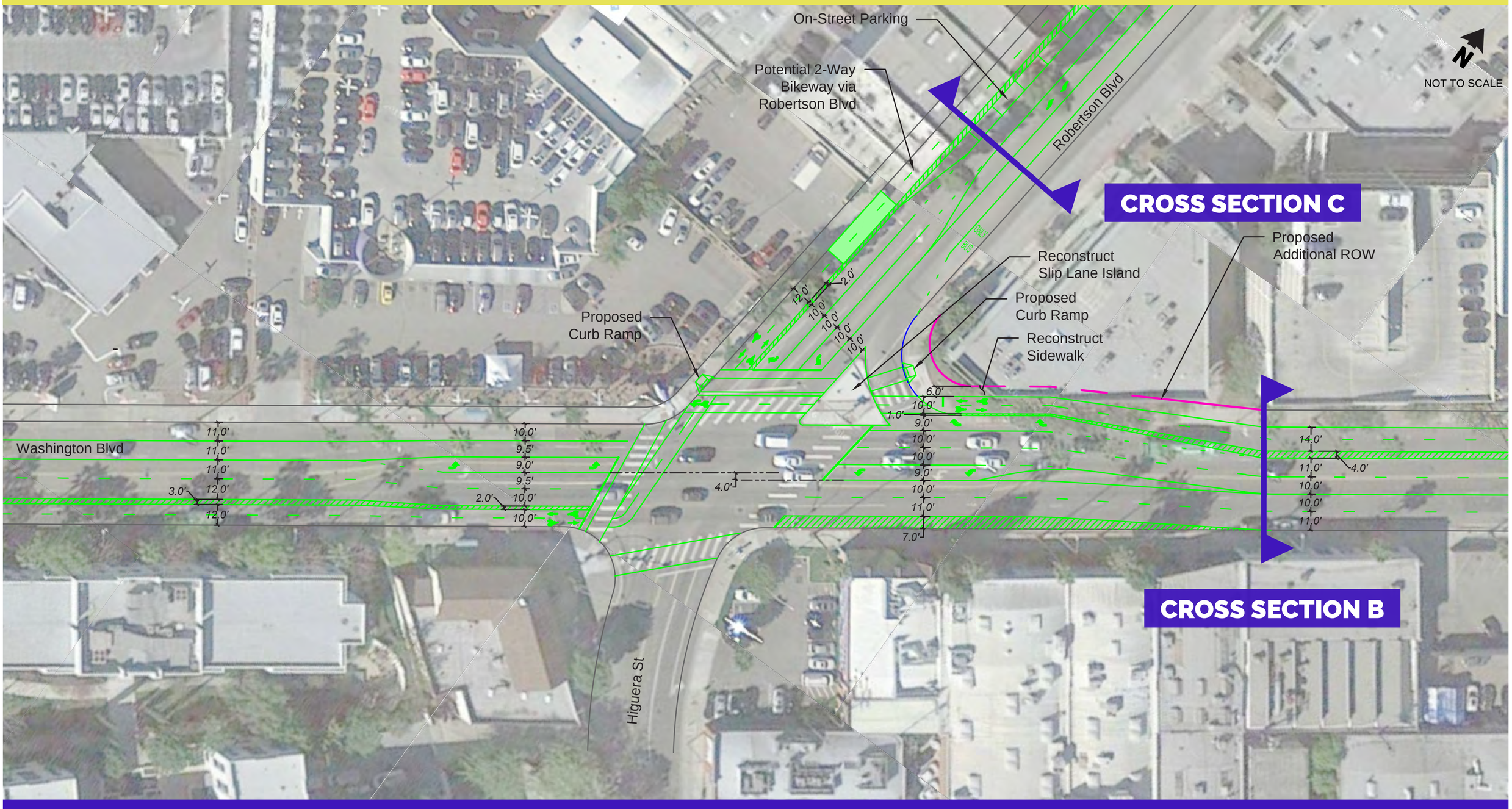


PROPOSED:



2 WASHINGTON/ROBERTSON/HIGUERA

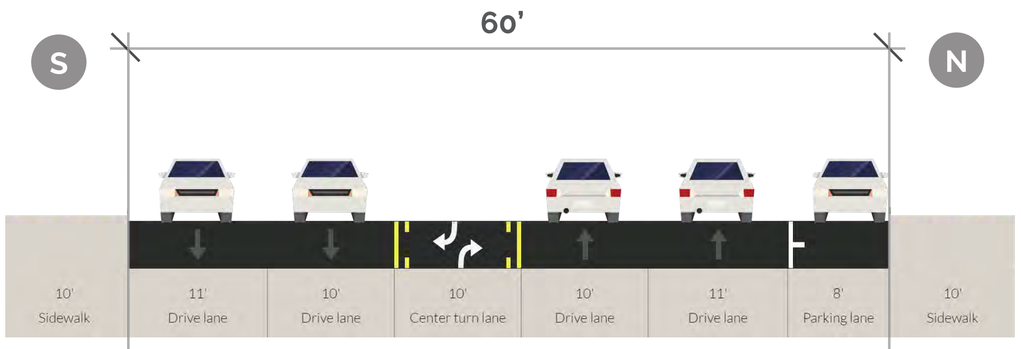
FEATURES:



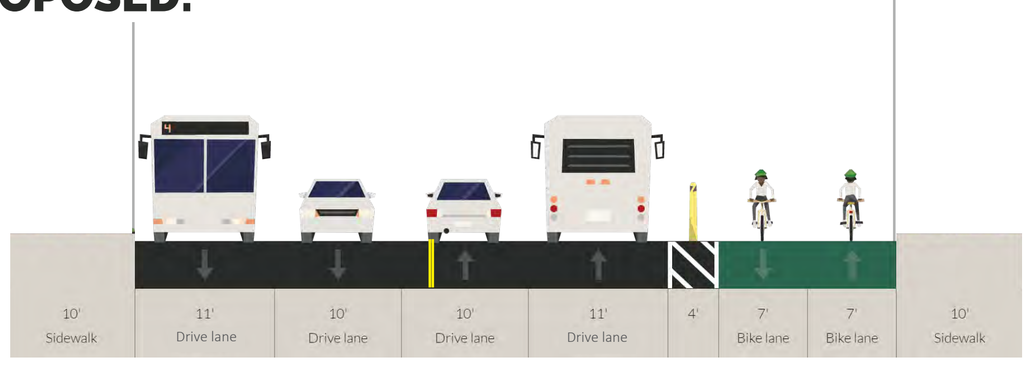
CROSS SECTION B

WASHINGTON BLVD
FROM ROBERTSON BLVD/HIGUERA ST TO LANDMARK ST

EXISTING:



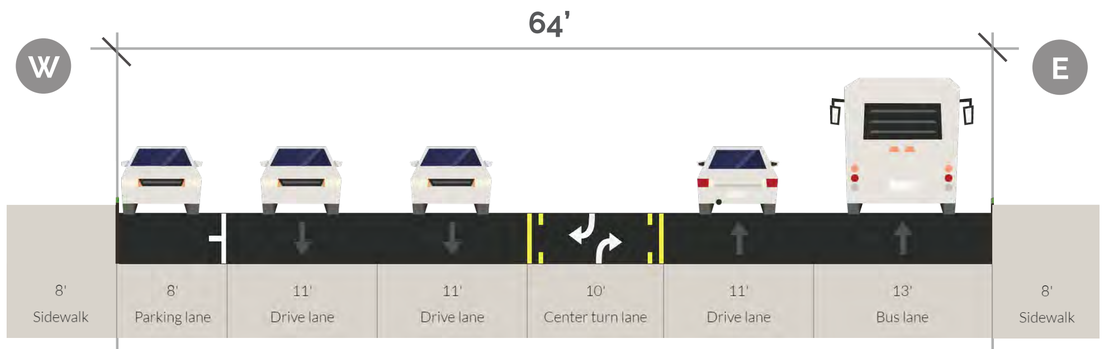
PROPOSED:



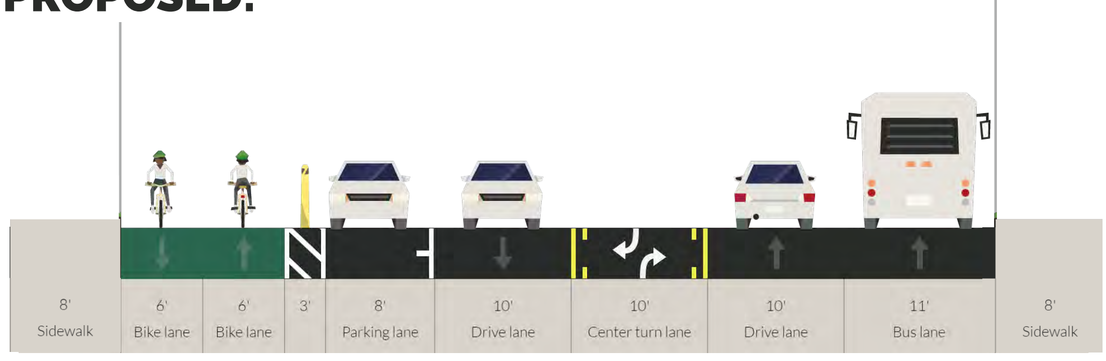
CROSS SECTION C

ROBERTSON BLVD
FROM WASHINGTON BLVD TO VENICE BLVD

EXISTING:



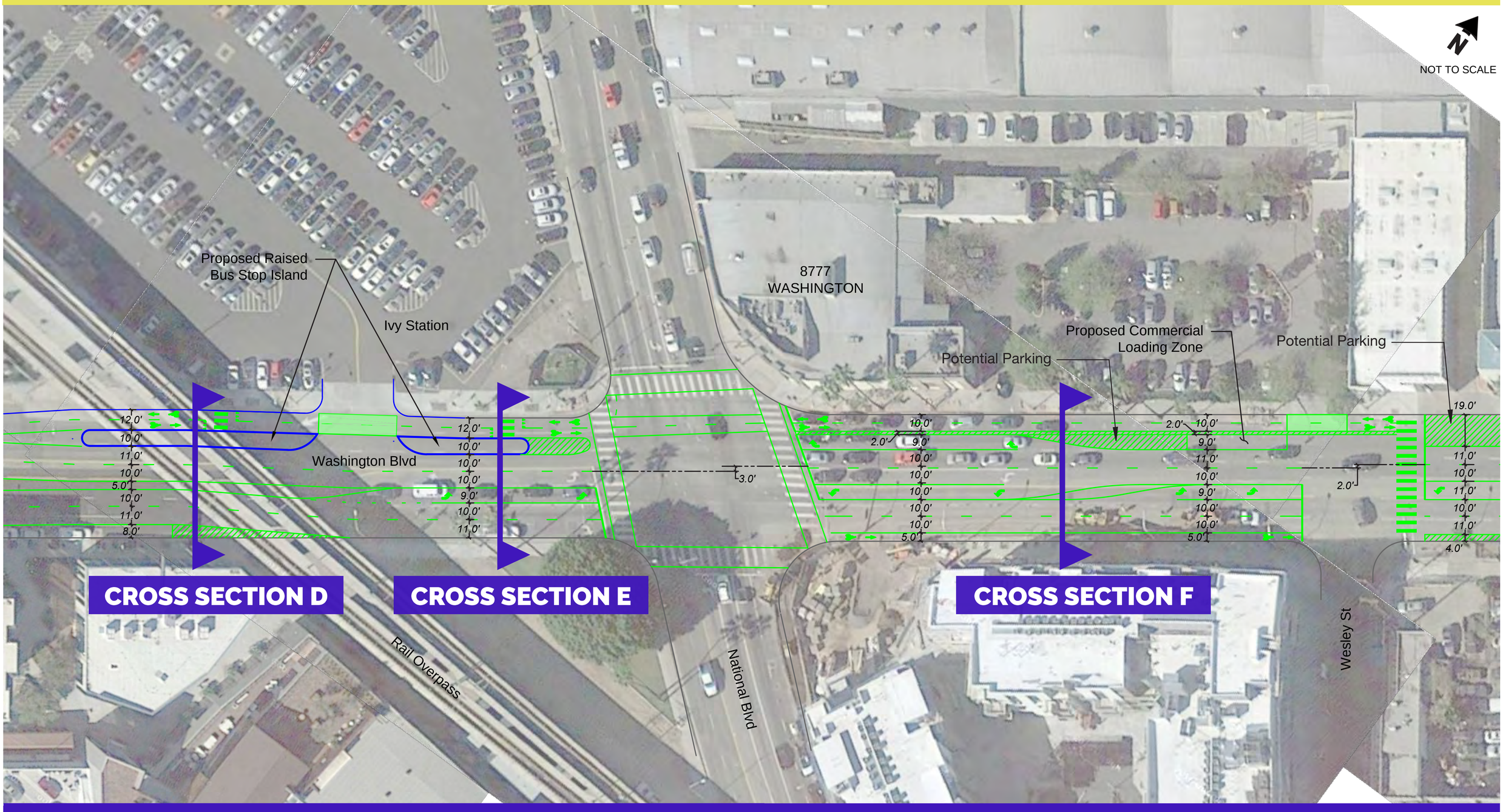
PROPOSED:



3 WASHINGTON/NATIONAL

FEATURES:

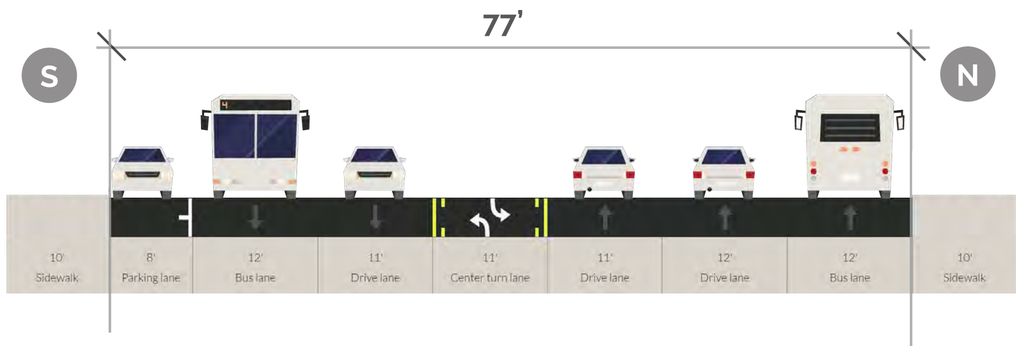
* EAST OF NATIONAL BLVD



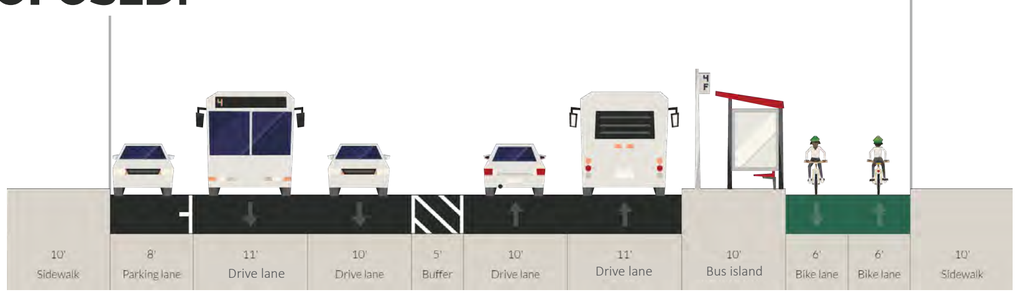
CROSS SECTION D

WASHINGTON BLVD UNDER RAIL OVERPASS

EXISTING:



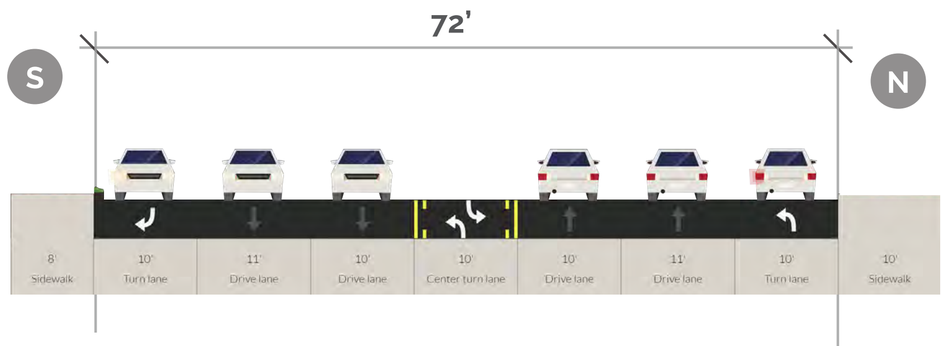
PROPOSED:



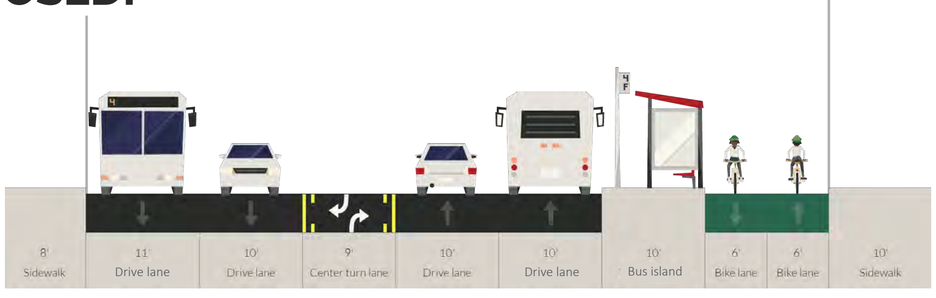
CROSS SECTION E

WASHINGTON BLVD FROM RAIL OVERPASS TO NATIONAL BLVD

EXISTING:



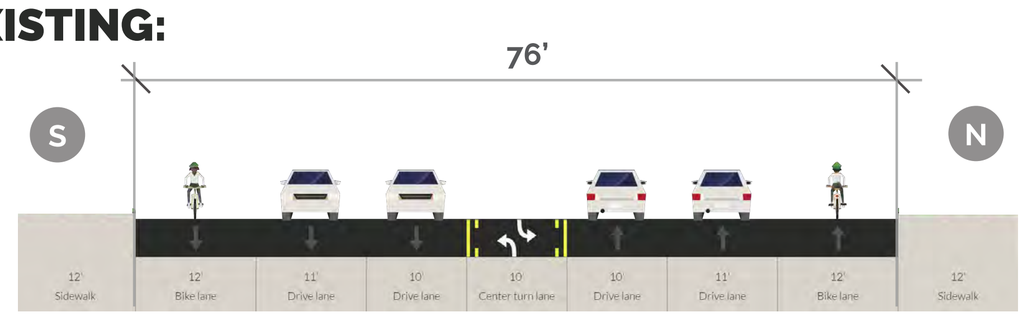
PROPOSED:



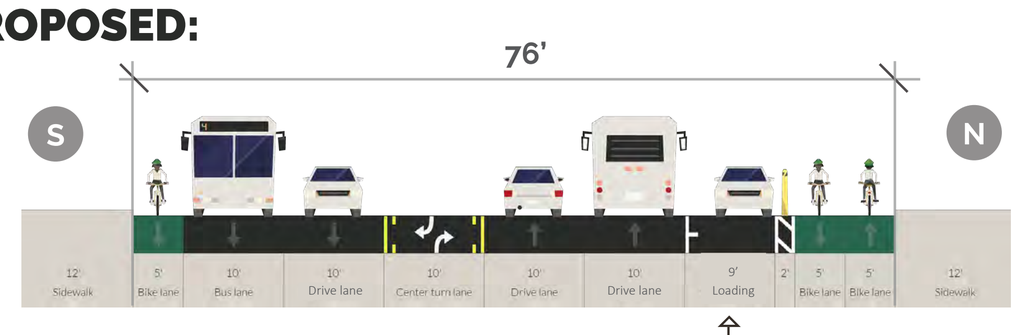
CROSS SECTION F

WASHINGTON BLVD FROM NATIONAL BLVD TO WESLEY ST

EXISTING:



PROPOSED:



9' loading zone transitions to RT lane @ intersection