TRAFFIC IMPACT STUDY

For

IV2 Rockland Logistics, LLC
Proposed Industrial Park at 25 Old Mill Road

Property Located at:

Old Mill Road & Hemion Road (CR 93)
Section 55.22 Block 1, Lot 1
Village of Suffern, Rockland County, NY

Prepared by:

DYNAMIC TRAFFIC

1904 Main Street | **245 Main Street, Suite #110**
Lake Como, NJ 07719 | **Chester, NJ 07930**
(732) 681-0760

Corey M. Chase, PE
NY PE License #93631

Kevin M. Savage, PE, PTOE
NY PE License #105693

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EXECUTIVE SUMMARY

Dynamic Traffic LLC has been retained to prepare this Traffic Impact Study to assess the traffic impact associated with the construction of an industrial park consisting of 1,221,800 SF of warehouse space (The Project) on the adjacent roadway network. This study was prepared in accordance with New York State Department of Transportation (NYSDOT) requirements and the study area was development based on coordination with Village of Suffern, Village of Montebello and NYSDOT officials. Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed warehouse development is projected to generate 186 entering trips and 56 exiting trips during the weekday morning peak hour and 71 entering trips and 186 exiting trips during the weekday evening peak hour that are "new" to the adjacent roadway network.

- Access to the site will be provided via two full movement driveways along Old Mill Road, which ultimately connects to Hemion Road (CR 93) and via a full movement driveway at the south end of the site along Hemion Road (CR 93). A left turn lane is proposed along northbound Hemion Road (CR 93) at the intersection with Old Mill Road.

- With the addition of site generated traffic, proposed intersection improvements and signal retiming, the intersection of Lafayette Avenue (NYS Route 59) and Campbell Avenue/Hemion Road (CR 93) is anticipated to operate at comparable levels of service and delays to No Build conditions during the peak hours studied. As part of The Project, it is proposed to widen the eastbound approach to extend the eastbound left turn lane to provide 500 FT of storage length and to reconfigure the approach to provide a dedicated left turn lane, a dedicated through lane and a shared through/right turn lane. Additionally, it is proposed to widen the southbound approach to provide dual southbound left turn lanes with a storage length of 175 FT and to modify the radius on the northeast corner of the intersection to facilitate tractor trailer turning maneuvers.

- With the addition of site generated traffic, proposed intersection improvements and signal retiming, the intersection of Lafayette Avenue (NYS Route 59) and Airmont Road (CR 89) is anticipated to operate at comparable levels of service and delays to No Build conditions during the peak hours studied. As part of The Project, it is proposed to widen and reconfigure the eastbound approach of the intersection to provide dual dedicated left turn lanes and to modify the radius on the northwest corner of the intersection to help facilitate southbound right turn movements for tractor trailers.

- With the addition of site generated traffic and a minor signal timing adjustment, the intersection of Airmont Road (CR 89) and the I-87 SB/I-287 EB Ramps is anticipated to operate at overall levels of service "E" or better during the analyzed peak hours.

- With the addition of site generated traffic and a minor signal timing adjustment, the intersection of Airmont Road (CR 89) and the I-87 NB/I-287 WB Ramps is anticipated to operate at No Build overall levels of service "E" or better during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) and North DeBaun Avenue is anticipated to operate at No Build overall level of service "B" with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) Montebello is anticipated to operate at overall levels of service "C" or better during the peak hours studied.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway is anticipated to operate at No Build overall level of service "A" with little to no change in delay during the peak hours studied.

- With the addition of site generated traffic, the intersection of Hemion Road (CR 93) and Dunnigan Drive is anticipated to operate at levels of service "C" or better with little to no change in delay during the peak hours studied.

- With the addition of site generated traffic, the intersection of Lafayette Avenue (NYS Route 59) & Brookside Avenue is anticipated to operate at No Build levels of service "D" or better with little to no change in delay during the peak hours studied.

- With the addition of site generated traffic and the installation of multi-way stop control, the intersection of Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive is anticipated to operate at overall levels of service "E" during the 2026 analysis scenario, with a reduction in queuing for the northbound approach during the peak hours studied.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) and Dunnigan Drive/Interstate Waste Services Driveway is anticipated to operate at levels of service consistent with No Build conditions with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Hemion Road (CR 93) and Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard is anticipated to operate at No Build levels of service "D" or better with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Hemion Road (CR 93) and Suffern Middle School Egress Driveway is anticipated to operate at No Build levels of service "C" or better with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Montebello Road (CR 93) and Suffern Middle School Driveway is anticipated to operate at No Build levels of service "C" or better with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Montebello Road (CR 93) and Montebello Elementary School Drive is anticipated to operate at levels of service "C" or better with little to no change in delay during the analyzed peak hours.

- As designed, the intersection of Hemion Road (CR 93) and Old Mill Road is anticipated to operate at levels of service "E" or better during the peak hours studied.

- As designed, the intersection of Hemion Road (CR 93) and the site driveway is anticipated to operate at levels of service "E" or better during the peak hours studied.

- When utilizing alternate ITE LUC 130 – Industrial Park, the proposed warehouse development is projected to generate 167 entering trips and 50 exiting trips during the weekday morning peak hour and 63 entering trips and 163 exiting trips during the weekday evening peak hour that are "new" to the adjacent roadway network. As noted, the current development proposal does not provide sufficient parking to accommodate the ITE average peak parking demand for LUC 130 and therefore is not anticipated to be develop with an industrial park type use.

- Under the conservative LUC 130 analysis, the following mitigation measures would be required:

    - Roadway widening, the construction of a dedicated westbound left turn lane, and signalization of the intersection Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64).
    - Signalization of the site driveway.

- As proposed, The Project's site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles and large wheel base vehicles.

- The proposed parking supply and design is sufficient to support the projected demand and satisfies the Ordinance requirements.

INTRODUCTION

It is proposed to construct a warehouse industrial park on a parcel of land currently developed with the former Novartis pharmaceutical complex, located along Hemion Road (CR 93) north of Lafayette Avenue (NYS Route 59) in the Village of Suffern, Rockland County, New York (see Figure 1 in Appendix A). The site is designated as Section 55.22 Block 1 - Lot 1 on the Village Tax Maps. It is proposed to demolish the existing complex and construct an industrial park with three (3) warehouse buildings totaling 1,221,800 SF, with Building 1 consisting of 963,100 SF, Building 2 consisting of 170,500 SF and Building 3 consisting of 88,200 SF ("The Project"). The site is located within the PLI – Planned Light Industrial Zone. Access to the site is currently provided via a full movement driveway at the southern end of the site along Hemion Road (CR 93) and a full movement driveway at the northern end of the site along Old Mill Road, which ultimately connects to Hemion Road (CR 93). It is proposed to maintain the existing access points along Hemion Road (CR 93); however, one additional full movement driveway will be constructed along Old Mill Road, providing a total of two access points to The Project along Old Mill Road.

Dynamic Traffic LLC has been retained to prepare this study to assess the traffic impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.

- Existing traffic data was collected via manual turning movement (MTM) counts during the weekday AM and weekday PM peak periods at the intersections of:

    - Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road (CR 93)
    - Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)
    - Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps
    - Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps
    - Airmont Road (CR 89) & North DeBaun Avenue
    - Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard
    - Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway
    - Hemion Road (CR 93) & Dunnigan Drive
    - Lafayette Avenue (NYS Route 59) & Brookside Avenue
    - Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64)
    - Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway
    - Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard
    - Hemion Road (CR 93) & Suffern Middle School Egress Driveway
    - Montebello Road (CR 64) & Suffern Middle School Driveway
    - Montebello Road (CR 64) & Montebello Elementary School Driveway

- Projections of traffic to be generated by the proposed development were prepared utilizing trip generation data as published by the Institute of Transportation Engineers. Site traffic was then assigned to the adjacent street system based upon the anticipated directional distribution.

- Capacity analyses were conducted for the Existing, No Build, and Build conditions for the study intersections.

- The existing points of ingress and egress were inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.

EXISTING CONDITIONS

A review of the existing roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the development. This included field investigations of the surrounding roadways and intersections, collection of traffic volume data, and extensive analyses.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

Lafayette Avenue (NYS Route 59) is an Urban Principal Arterial roadway under NYSDOT jurisdiction with a general east/west orientation. In the vicinity of the site the posted speed limit is 40 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided intermittently along both sides of the roadway. The pavement surface appears to be in good condition. Lafayette Avenue provides a slightly curved horizontal alignment west of Hemion Road with a downgrade from east to west and provides generally adequate sight distance. The land uses along Lafayette Avenue in the vicinity of The Project are mixed commercial and residential.

Hemion Road (CR 93) is an Urban Major Collector roadway under Rockland County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 40 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are only provided intermittently near the intersection of Campbell Avenue/Hemion Road and Lafayette Avenue (NYS Route 59). The pavement surface appears to be in good condition. Hemion Road provides a curved horizontal alignment with an upgrade from north to south and provides generally adequate sight distance. The land uses along Hemion Road in the vicinity of The Project are primarily industrial.

Airmont Road (CR 89) is an Urban Minor Arterial roadway under Rockland County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides two travel lanes in each direction north of Lafayette Avenue (NYS Route 59) and one travel lane in each direction south of Lafayette Avenue (NYS Route 59). On-street parking is not provided along either side of the roadway. Curb and sidewalk are provided along both sides of the roadway. The pavement surface appears to be in good condition. Airmont Road provides a curved horizontal alignment and a rolling vertical alignment and provides generally adequate sight distance. The land uses along Airmont Road in the vicinity of The Project are primarily commercial.

Interstate 87/Interstate 287 (New York State Thruway) is an Urban Principal Arterial Interstate roadway under New York State Thruway Authority jurisdiction. In the vicinity of the site the posted speed limit is 55 MPH and the roadway provides three lanes of travel in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are not provided along either side of the roadway. The pavement surface along the ramps at Airmont Road appears to be in good condition. I-87/I-287 has an overall curved horizontal alignment and rolling vertical alignment. The land uses in the vicinity of the I-87/I-287 ramps at Airmont Road are a mix of commercial, office, and industrial.

Montebello Road (CR 64) is an Urban Major Collector roadway under Rockland County jurisdiction to the east of Hemion Road and municipal jurisdiction to the west of Hemion Road with a general east/west orientation. The road has a posted 5-ton vehicular weight restriction. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are not provided along either side of the roadway. The pavement surface appears to be in good condition. Montebello Road provides a curved horizontal alignment and a rolling vertical alignment. Adequate sight distance is generally provided at the study area intersection; however, due to the horizontal curves along Montebello Road (CR 64) to the east of the Suffern Middle School, limited sight distance is provided for driveways in the vicinity of the curves. The land uses along Montebello Road are primarily residential.

Campbell Avenue is an Urban Minor Arterial roadway under municipal jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided along the northbound side of the roadway. The pavement surface appears to be in good condition. Campbell Avenue provides a curved horizontal alignment with a downgrade from north to south and provides generally adequate sight distance. The land uses along Campbell Avenue in the vicinity of The Project are primarily residential.

North DeBaun Avenue is a local roadway under private jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is not posted and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided along the westbound side of the roadway. The pavement surface appears to be in fair condition. North DeBaun Avenue provides a straight horizontal alignment and a flat vertical alignment and provides generally adequate sight distance. The land uses along North DeBaun Avenue are a mix of commercial, office, and lodging.

Rella Boulevard is a local roadway under municipal jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is not posted and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is not provided along either side of the roadway. The pavement surface appears to be in good condition. Rella Boulevard provides a straight horizontal alignment and a downhill vertical alignment from east to west. The land uses along Rella Boulevard are a mix of office and residential.

Executive Boulevard is a local roadway under municipal jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is not posted and the roadway provides one lane of travel in each direction separated by a curbed median. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway while sidewalk is not provided along either side of the roadway. The pavement surface appears to be in good condition. Executive Boulevard provides a straight horizontal alignment and a downhill vertical alignment from east to west. The land uses along Executive Boulevard are a mix of office and lodging.

Brookside Avenue is a local roadway under municipal jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are not provided along either side of the roadway. The pavement surface appears to be in good condition. Brookside Avenue provides a straight horizontal alignment with an upgrade from north to south and provides generally adequate sight distance. The land uses along Brookside Avenue are primarily residential.

Ryan Mansion Drive is a local roadway under private jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 15 MPH and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway while sidewalk is intermittently provided along both sides of the roadway. The pavement surface appears to be in good condition. Ryan Mansion Drive provides a straight horizontal alignment and a downgrade from north to south and provides generally adequate sight distance. The land uses along Ryan Mansion Drive are primarily office.

Old Mill Road is a local roadway under New York State Thruway Authority jurisdiction with a general east/west orientation. At the time of publication of this study, it is understood that the jurisdiction of Old Mill Road may change as the New York State Thruway Authority is in the process of auctioning off the roadway. In the vicinity of the site the posted speed limit is not posted and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are not provided along either side of the roadway. The pavement surface appears to be in good condition. Old Mill Road provides a relatively straight horizontal alignment with a horizontal curve near the intersection with Hemion Road (CR 93) and a downgrade from east to work and provides generally adequate sight distance.

Existing Bicycle and Pedestrian Facilities

Pedestrian and bicycle facilities in the vicinity of the site are provided in the form of paved shoulders intermittently along Hemion Road. Paved shoulders are also provided along both sides along Lafayette Avenue, along with sidewalk fully along the westbound side and intermittently along the eastbound side. Paved shoulders are not provided along either side of Airmont Road, while sidewalk is provided along both sides of Airmont Road south of Dunnigan Drive, along the southbound side between Dunnigan Drive and Executive Boulevard, and along the northbound side between Executive Boulevard and Montebello Road/Rella Boulevard.

Painted crosswalks and curb ramps are provided along all four legs of the intersections of Lafayette Avenue & Hemion Road/Campbell Avenue and Lafayette Avenue & Airmont Road. Painted crosswalks and curb ramps without detectable warning surfaces are provided along the western legs of the Airmont Road & I-287/I-87 Ramp intersections.

Existing Mass Transit Facilities

Hudson Link and Transport of Rockland (TOR) provide bus service in the nearby area. Hudson Link provide bus service in the area via the H01 and H01X lines, which runs from Suffern to the Palisades Center in West Nyack. The nearest Hudson Link bus stop is located approximately 1.7 miles from the site at the intersection of Airmont Road and Hemion Road. TOR provides bus service in the area via the 59 and Loop 3 lines, which run from Suffern to Nyack and Suffern to the Spring Valley Transit Center, respectively. The nearest 59 Line bus stop is located approximately 1.7 miles from the site at the intersection of Airmont Road and Hemion Road, while the nearest Loop 3 Line bus stop is located approximately 1.2 miles from the site at Good Samaritan Hospital.

NJ Transit provides train service in the area via the Main/Bergen County-Port Jervis Line, which runs from Port Jervis, NY to Hoboken, NJ with transfers to New York Penn Station and Trenton, NJ via Secaucus Junction. The nearest train station is located approximately 2.3 miles from the site at the intersection of Orange Avenue (U.S. Route 202) and Park Place in the Village of Suffern.

Existing Truck Routes

Interstate 87/287 and NYS Route 17 are designated as "Qualifying Highways" according to the October 2020 edition of the NYSDOT *Official Description of Designated Qualifying and Access Highways*. A "Qualifying Highway" is defined as a highway designated as part of the Surface Transportation Assistance Act (STAA) of 1982 which allows STAA vehicles (Tractor trailers combinations greater than 65 feet, tractor with 28 foot tandem trailers, maxi-cubes, triple saddle mounts, stinger-steered auto carriers and boat transporters) and 53' trailers to use that highway and any other highway within one linear mile of the Qualifying highway. No truck restrictions existing along Lafayette Avenue (NYS Route 59), Airmont Road (CR 89) or Hemion Road (CR 93) which provide direct truck access to/from Interstate 87/287.

Existing School Activities

The Suffern Middle School and Montebello Elementary School are located to the north of the site along Hemion Road (CR 93) and Montebello Road (CR 64). Access to the Suffern Middle School is provided via one ingress only driveway along Hemion Road (CR 93), one egress only driveway along Hemion Road (CR 93) and one full movement driveway along Montebello Road (CR 64). Access to the Montebello Elementary School is provided via one full movement driveway along Montebello Road (CR 64). The start times for both schools are currently offset by 50 minutes and the dismissal times for both schools are currently offset by 30 minutes. At the Suffern Middle School, both buses and cars enter using the ingress only driveway along Hemion Road (CR 93). Buses circulate in front of the school for pick up/drop off and exit along Hemion Road (CR 93). Parents circulate around the rear of the school for pick up/drop off and exit along Montebello Road (CR 64). An exiting left turn lane restriction is currently is place at the Montebello Road (CR 64) driveway from 7:40 – 8:25 AM and from 2:30 – 3:15 PM.

Existing Traffic Volumes

Manual turning movement (MTM) counts were conducted on Wednesday, June 15, 2022 from 7:00 – 9:00 AM and 3:00 – 6:30 PM at the following intersections. The scope of study was developed through consultations with the Village of Suffern, the Village of Montebello, Rockland County Highway Department, NYS Thruway Authority and NYSDOT. It should be noted that these counts were taken during a full school day for the Suffern Central School District.

- Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road (CR 93)
- Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)
- Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps
- Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps
- Airmont Road (CR 89) & North DeBaun Avenue
- Hemion Road (CR 93) & Dunnigan Drive
- Lafayette Avenue (NYS Route 59) & Brookside Avenue
- Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64)

Additional MTM counts were conducted on Thursday, September 8, 2022 from 7:00 – 9:00 AM and 3:00 – 6:30 PM at the following intersections:

- Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway
- Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard
- Hemion Road (CR 93) & Suffern Middle School Egress Driveway
- Montebello Road (CR 64) & Suffern Middle School Driveway
- Montebello Road (CR 64) & Montebello Elementary School Driveway

MTM counts were also conducted on Wednesday, July 27, 2022 from 7:00 – 9:00 AM and 3:00 – 6:30 PM at the intersection of Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard. A seasonal adjustment factor of 1.112 for commuter-dominated roadways during the work week was obtained from the NYSDOT Seasonal Adjustment Factor Table published in May 2022 to account for the decrease in traffic during the summer months.

Additional MTM counts were conducted on Wednesday, May 24, 2023, from 7:00 – 9:00 AM and 3:00 – 6:30 PM at the intersection of Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway.

Review of the collected traffic data reveals that the weekday morning peak street hour (PSH) occurs between 7:45 - 8:45 AM, the weekday evening PSH occurs between 3:15 - 4:15 PM. It should be noted that in order to provide a conservative analysis along Hemion Road (CR 93), as the critical site access points are along Hemion Road (CR 93), the peak hour traffic volumes were balanced between Lafayette Avenue (NYS Route 59) and Old Mill Road. Figure 2, located in Appendix A, shows the existing peak hour traffic volumes at the study intersections. All traffic counts are contained in Appendix B.

COVID-19 Traffic Count Normalization

It should be noted that various traffic related impacts associated with the COVID-19 pandemic were in effect as of the time of the traffic counts. As a result, current traffic volumes on the surrounding roadways may be atypical at this time and not entirely representative of "existing" traffic conditions. Therefore, historical traffic volume data has been reviewed and compared with current traffic volumes in order to account for this effect. Historical traffic volume recordings collected on Tuesday, May 7, 2019 at the intersection of Lafayette Avenue (NYS Route 59) and Hemion Road (CR 93) were obtained from the *Traffic Impact Study*, prepared by Maser Consulting PA, dated April 15, 2020. Additional historical traffic volume recordings collected on October 18, 2018 at the intersection of Airmont Road (CR 89) and Montebello Road (CR 64)/Rella Boulevard were obtained from the *Traffic Impact Study*, prepared by Harry Baker & Associates, dated July 13, 2020, last revised February 8, 2021.

In order to perform an appropriate comparison, the 2018 and 2019 volumes were increased to better represent 2022 conditions by applying a growth rate of 2.0% per year, for a period of three (3) and four (4) years, respectively. The adjusted 2018 and 2019 traffic volumes were then compared to the existing 2022 traffic counts as summarized in the table below. The adjusted 2018 volumes at the intersection of Airmont Road (CR 89) and Montebello Road (CR 64)/Rella Boulevard were compared to the seasonally adjusted 2022 counts.

Table I
Traffic Count Comparison

Location	Date	Intersection Peak Hour Traffic Volume				COVID-19 Adjustment Factor	
		As-Counted		With Background Growth [1] [2]			
		AM	PM	AM	PM	AM	PM
Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road (CR 93)	March 2019	1,741	2,003	1,848	2,126	1.12	1.15
	June 2022	1,648	1,844	1,648	1,844		
Airmont Road & Montebello Road/Rella Boulevard	Oct. 2018	1,762	2,259	1,907	2,445	1.15	1.13
	July 2022 (Adj.)	1,654	2,162	1,654	2,162		
					Weighted Average	**1.14**	**1.14**

[1] March 2019 data increased by 2.0% compounded annually for three (3) years.
[2] October 2018 data increased by 2.0% compounded annually for four (4) years.

As seen above, the current traffic volumes were found to be lower than the historical volumes grown to the current year. A weighted average of the necessary COVID-19 adjustment factors for each of the intersections was calculated to determine an average adjustment factor for the overall network, which was found to be 1.14 for both peak hours. Therefore, an adjustment factor of 1.14 for both the AM and PM were applied to those volumes respectively to provide a conservative analysis. It should be noted that the counts conducted in May 2023 were not adjusted for COVID-19 as traffic patterns are generally considered to have stabilized following the cessation of economic and school restrictions.

Figure 3, located in Appendix A, shows the adjusted existing peak hour traffic volumes at the study intersection. All traffic counts are contained in Appendix B.

Existing Capacity Analysis

The methodology utilized in the capacity analyses is described in the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, and Chapter 5 of the NYSDOT Highway Design Manual. In general, the term Level of Service (LOS) is used to provide a "qualitative" evaluation of capacity based upon certain "quantitative" calculations related to empirical values, such as traffic volume and intersection control.

At signalized intersections, factors that affect the various approach capacities include width of approach, number of lanes, signal "green time", turning percentages, truck volumes, etc. However, delays cannot be related to capacity in a simple one-to-one fashion. For example, it is possible to have delays in the Level of Service "F" range without exceeding roadway capacity. Substantial delays can exist without exceeding capacity if one or more of the following conditions exist: long signal cycle lengths; a particular traffic movement experiences a long red time; or progressive movement for a particular lane group is poor. Table I describes the level of service ranges for signalized intersections.

An unsignalized (STOP sign controlled) driveway or side street along a through route is seldom critical from an overall capacity standpoint, however, it may be of great significance to the capacity of the minor cross-route, and it may influence the quality of traffic flow on both. When analyzing an unsignalized intersection, it is assumed that both the major street through and right turn movements are unimpeded and have the right-of-way over all side street traffic and left turns from the major street. All other turning movements in the intersection cross, merge with, or are otherwise impeded by major street movements. Traffic delays at unsignalized intersections are determined by sequentially processing these impeded movements. Table II describes the level of service ranges for unsignalized (stop controlled) intersections.

Table II
Level of Service Criteria
for Signalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
A	0.0 to 10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	greater than 80.0

Table III
Level of Service Criteria
for Unsignalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
a	0.0 to 10.0
b	10.1 to 15.0
c	15.1 to 25.0
d	25.1 to 35.0
e	35.1 to 50.0
f	greater than 50.0

It should be noted that the analyses within the *Highway Capacity Manual* assume a random arrival for all the movements, which may not be the case if an adjacent traffic signal is present that platoons vehicles.

All capacity and queuing analyses were performed utilizing Synchro 11 software. Table IV summarizes the existing levels of service (LOS) and delays. All capacity analysis calculation worksheets are contained in Appendix C.

Table IV
Existing Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH		PM PSH	
			LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	E (74)	0.93	D (46)	0.80
		T	D (49)	0.85	C (32)	0.73
		R	A (1)	0.06	A (1)	0.10
	WB	L	C (31)	0.61	B (16)	0.28
		T	E (65)	0.96	D (53)	0.94
		R	A (1)	0.11	A (1)	0.11
	NB	L	C (32)	0.58	C (33)	0.58
		TR	D (43)	0.66	E (56)	0.83
	SB	L	C (29)	0.50	C (33)	0.59
		TR	E (55)	0.87	F (82)	0.99
	Overall		**D (49)**	**0.96**	**D (45)**	**0.99**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (86)	0.99	F (110)	1.08
		T	D (42)	0.57	D (48)	0.65
		R	A (1)	0.03	A (2)	0.10
	WB	L	D (40)	0.34	D (37)	0.46
		T	E (65)	0.78	F (83)	0.90
		R	E (70)	0.98	D (45)	0.89
	NB	L	C (30)	0.12	D (42)	0.24
		TR	D (53)	0.70	D (53)	0.67
	SB	L	F (29)	0.98	E (61)	0.82
		T	F (95)	0.99	E (77)	0.96
		R	A (3)	0.50	A (7)	0.57
	Overall		**E (61)**	**0.99**	**E (57)**	**1.08**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (22)	0.65	C (27)	0.69
		R	D (41)	0.92	C (31)	0.86
	NB	T	B (16)	0.74	A (5)	0.51
	SB	L	D (36)	0.75	C (32)	0.78
		T	C (22)	0.44	A (8)	0.48
	Overall		**C (25)**	**0.92**	**B (15)**	**0.86**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	D (39)	0.83	C (33)	0.76
		LT	D (40)	0.83	C (33)	0.76
		R	C (22)	0.69	B (20)	0.73
	NB	L	F (215)	1.40	D (48)	0.95
		T	B (12)	0.52	A (4)	0.37
	SB	T	C (22)	0.61	D (41)	0.77
		R	A (6)	0.48	C (20)	0.57
	Overall		**D (44)**	**1.40**	**C (28)**	**0.95**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table IV (continued)
Existing Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH		PM PSH	
			LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (33)	0.37	C (33)	0.35
	WB	LTR	C (30)	0.14	C (31)	0.20
	NB	L	A (3)	0.08	A (4)	0.09
		TR	A (10)	0.62	B (10)	0.60
	SB	L	A (5)	0.06	A (5)	0.08
		TR	A (2)	0.57	A (2)	0.61
	Overall		**A (7)**	**0.62**	**A (7)**	**0.61**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (22)	0.28	C (28)	0.33
		R	C (26)	0.75	C (26)	0.63
	WB	L	B (20)	0.01	C (26)	0.16
		T	B (20)	0.01	C (25)	0.06
		R	C (20)	0.01	C (26)	0.16
	NB	L	A (10)	0.44	B (12)	0.66
		TR	A (1)	0.49	A (1)	0.40
	SB	L	B (11)	0.04	A (7)	0.05
		TR	B (16)	0.44	B (13)	0.50
	Overall		**B (13)**	**0.75**	**B (12)**	**0.66**
Airmont Road (CR 89) & Executive Boulevard/ Ramapo Hills Professional Center Driveway	EB	LT	D (35)	0.13	C (34)	0.21
		R	C (31)	0.14	C (33)	0.36
	WB	LTR	C (35)	0.02	C (34)	0.11
	NB	L	A (3)	0.25	A (3)	0.12
		TR	A (1)	0.36	A (1)	0.37
	SB	L	A (4)	0.00	A (4)	0.01
		T	A (5)	0.37	A (5)	0.43
		R	A (4)	0.03	A (4)	0.03
	Overall		**A (3)**	**0.37**	**A (5)**	**0.43**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	b (14)	0.054	b (14)	0.086
	SB	L	a (9)	0.005	a (8)	0.002
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	a (9)	0.083	b (11)	0.218
	NB	LR	c (15)	0.297	c (21)	0.387
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	WB	L	a (9)	0.257	a (8)	0.142
	NB	LTR	d (35)	0.753	d (26)	0.708
	SB	LTR	d (31)	0.029	c (16)	0.034
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (75)	0.393	f (94)	0.616
		R	b (12)	0.035	b (13)	0.084
	WB	LTR	b (13)	0.025	b (13)	0.031
	NB	L	a (10)	0.020	b (10)	0.022
	SB	L	b (10)	0.007	b (12)	0.006

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table IV (continued)
Existing Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH		PM PSH	
			LOS	v/c	LOS	v/c
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	c (23)	0.063	c (16)	0.073
		R	b (12)	0.031	b (10)	0.013
	NB	L	a (9)	0.016	a (8)	0.010
	SB	L	a (9)	0.069	a (8)	0.029
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	c (16)	0.140	b (14)	0.138
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (9)	0.013	a (8)	0.020
	NB	LR	c (17)	0.300	b (14)	0.138
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (8)	0.062	a (8)	0.016
	NB	LR	b (13)	0.148	b (12)	0.168

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

Existing Queue Analysis

Queue length conditions at the study intersections were analyzed under the Existing conditions. Queuing conditions were observed by our office on Thursday, May 26th and Thursday, December 8th, 2022. The Synchro model was calibrated based upon the field observations. The 95th percentile queues for each study peak hour are summarized in Table V below.

Table V
Existing Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH	PM PSH
Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road (CR 93)	EB	L	75’	233’	238’
		T	-	447’	478’
		R	310’	-	-
	WB	L	180’	108’	62’
		T	-	530’	575’
		R	560’	-	-
	NB	L	150’	98’	125’
		TR	-	238’	249’
	SB	L	145’	109’	128’
		TR	-	330’	350’
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	330’	634’	753’
		T	-	283’	356’
		R	145’	-	11’
	WB	L	175’	103’	152’
		T	-	210’	299’
		R	170’	555’	466’
	NB	L	140’	50’	103’
		TR	-	402’	394’
	SB	L	100’	578’	480’
		T	-	549’	751’
		R	-	34’	117’
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	120’	208’	190’
		R	-	330’	215’
	NB	T	-	145’	53’
		R	80’	0’	0’
	SB	L	150’	153’	148’
		T	-	285’	165’
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	520’	202’	236’
		LT	-	202’	238’
		R	350’	136’	180’
	NB	L	105’	305’	268’
		T	-	207’	14’
	SB	T	-	187’	369’
		R	140’	58’	216’
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	-	88’	83’
	WB	LTR	-	30’	45’
	NB	L	130’	8’	8’
		TR	-	253’	248’
	SB	L	155’	5’	5’
		TR	-	30’	35’

Table V (continued)
Existing Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH	PM PSH
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	-	73’	78’
		R	140’	253’	170’
	WB	L	90’	3’	48’
		T	-	-	15’
		R	35’	3’	38’
	NB	L	290’	63’	85’
		TR	-	20’	15’
	SB	L	290’	8’	8’
		TR	-	195’	230’
Airmont Road (CR 89) & Executive Boulevard/ Ramapo Hills Professional Center Driveway	EB	LT	-	18’	33’
		R	-	18’	48’
	WB	LTR	-	3’	15’
	NB	L	100’	10’	5’
		TR	-	10’	13’
	SB	L	60’	0’	0’
		T	-	110’	140’
		R	150’	8’	5’
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	-	5’	8’
	SB	L	-	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	-	8’	20’
	NB	LR	-	30’	45’
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	WB	L	-	25’	13’
	NB	LTR	-	155’	143’
	SB	LTR	-	3’	3’
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	-	40’	73’
		R	290’	3’	8’
	WB	LTR	-	3’	3’
	NB	L	100’	3’	3’
	SB	L	120’	0’	0’
Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard	EB	L	-	5’	5’
		R	-	3’	0’
	NB	L	-	0’	0’
	SB	L	-	5’	3’
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	-	13’	13’
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	-	0’	3’
	NB	LR	-	30’	13’
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	-	5’	3’
	NB	LR	-	13’	15’

The following are discussions pertaining to each of the existing intersections analyzed. It should be noted that the existing percentage of trucks and peak hour factors were used in the existing analysis.

Lafayette Avenue (NYS Route 59) and Campbell Avenue/Hemion Road (CR 93)

Campbell Avenue and Hemion Road (CR 93) both intersect Lafayette Avenue (NYS Route 59) to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from the New York State Department of Transportation which indicates that the traffic signal operates under a four-phase operation with a variable background cycle length with pre-emption in both directions for buses (the traffic signal timing directive is included in Appendix B).

Both the eastbound and westbound approaches of Lafayette Avenue (NYS Route 59) provide a dedicated 12 FT wide left turn lane, a dedicated 12 FT wide through lane, and a dedicated 12 FT wide right turn lane. The northbound approach of Campbell Avenue provides a dedicated 15 FT wide left turn lane and a shared 12 FT wide through/right turn lane. The southbound approach of Hemion Road (CR 93) also provides a dedicated 13 FT wide left turn lane and a shared 13 FT wide through/right turn lane.

It should be noted that HCM 6th Edition methodology does not support clustered intersections. In order to include the bus pre-emption in the analysis, the intersection was modeled as a clustered intersection with a separate signalized intersection for the bus pre-emption. Therefore, Synchro methodology was used to obtain the levels of service, delays, and queues.

A review of the existing analysis reveals that the intersection operates at overall levels of service "D" during the analyzed peak periods. Additionally, all intersection movements operate at levels of service "E" or better during the analyzed peak periods, with the exception of the southbound through/right turn movement, which operates at level of service "F" during the weekday evening peak hour. See Table IV for the individual movement levels of service and delays.

A review of the existing analysis reveals that the 95th percentile queue length for the eastbound left turn lane exceeds the available storage length during the weekday morning and evening peak hours. See Table V for the individual movement 95th percentile queues.

Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)

Airmont Road (CR 89) intersects Lafayette Avenue (NYS Route 59) to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from the New York State Department of Transportation which indicates that the traffic signal operates under a four-phase operation with a variable background cycle length with pre-emption in the eastbound direction for buses (the traffic signal timing directive is included in Appendix B).

Both the eastbound and westbound approaches of Lafayette Avenue (NYS Route 59) provide a dedicated 13 FT wide left turn lane, a dedicated 12 FT wide through lane, and a dedicated right turn lane (11 FT wide eastbound lane and 9 FT wide westbound lane). The northbound approach of Airmont Road (CR 89) provides a dedicated left turn lane, a dedicated through lane, and a shared through/right turn lane. The southbound approach of Airmont Road (CR 89) provides a dedicated left turn lane, a dedicated through lane, and a dedicated right turn lane.

It should be noted that HCM 6th Edition methodology does not support clustered intersections. In order to include the bus pre-emption in the analysis, the intersection was modeled as a clustered intersection with a separate signalized intersection for the bus pre-emption. Therefore, Synchro methodology was used to obtain the levels of service, delays, and queues.

A review of the existing analysis reveals that the intersection operates at overall level of service "E" during the analyzed peak periods. Additionally, all intersection movements operate at levels of service "E" or better during the analyzed peak periods, with the exception of the eastbound left turn and southbound right turn movements during the weekday morning peak hour and the eastbound left turn, westbound through, and southbound through movements during the weekday evening peak hour which operate at level of service "F". See Table IV for the individual movement levels of service and delays.

A review of the existing analysis reveals that the 95th percentile queue length for the eastbound left turn lane, westbound right turn lane, and the southbound left turn lane exceeds the available storage length during the weekday morning and evening peak hours. See Table V for the individual movement 95th percentile queues.

Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps

The I-87 SB/I-287 EB on/off ramps intersect Airmont Road (CR 89) to form a four-leg intersection controlled by a traffic signal. The traffic signal timings were requested from the Town of Ramapo, Rockland County, NYSDOT, and the New York State Thruway Authority (NYSTA) but were not received. Field timings indicate that the signal operates under a three-phase operation with a 75-second background cycle length.

The northbound approach of Airmont Road (CR 89) provides two dedicated 11 FT wide through lanes and a dedicated 14 FT wide right turn lane, while the southbound approach provides two dedicated 12 FT wide left turn lanes and two dedicated 12 FT wide through lanes. The eastbound approach of the off-ramp provides a shared 12 FT wide left turn/through lane and a dedicated 12 FT wide right turn lane.

A review of the existing analysis reveals that the intersection operates at overall levels of service "C" or better during the analyzed peak periods. Additionally, all movements operate at levels of service "D" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

A review of the existing analysis reveals that the 95th percentile queue length exceeds the available storage length for the eastbound left turn/through lane and the southbound left turn lane during the weekday morning and evening peak hours. See Table V for the individual movement 95th percentile queues.

Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps

The I-87 NB/I-287 WB on/off ramps intersect Airmont Road (CR 89) to form a four-leg intersection controlled by a traffic signal. The traffic signal timings were requested from the Town of Ramapo, Rockland County, NYSDOT, and NYSTA but were not received. Field timings indicate that the signal operates under a three-phase operation with a 75-second background cycle length.

The northbound approach of Airmont Road (CR 89) provides a dedicated 11 FT wide left turn lane and two dedicated 10 FT wide through lanes, while the southbound approach provides two dedicated 12 FT wide through lanes and a dedicated 12 FT wide right turn lane. The westbound approach of the off-ramp provides a dedicated 12 FT wide left turn lane, a shared 12 FT wide left turn/through lane, and a dedicated 12 FT wide right turn lane.

It should be noted that HCM 6th Edition methodology does not support turning movements with shared and exclusive lanes. Therefore, Synchro methodology was used to obtain the levels of service, delays, and queues.

A review of the existing analysis reveals that the intersection operates at overall levels of service "D" or better during the analyzed peak periods. Additionally, all movements operate at levels of service "E" or better during the analyzed peak periods, with the exception of the northbound left turn movement during the weekday morning peak hour, which operates at level of service "F". See Table IV for the individual movement levels of service and delays.

A review of the existing analysis reveals that the 95th percentile queue length exceeds the available storage length for the northbound left turn lane during the weekday morning and evening peak hours and the southbound right turn lane during the weekday evening peak hour. See Table V for the individual movement 95th percentile queues.

Airmont Road (CR 89) & North DeBaun Avenue

North DeBaun Avenue intersects Airmont Road to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from the Town of Ramapo, which indicates that the traffic signal operates under a three-phase operation with a 75-second background cycle length (the traffic signal timing directive is included in Appendix B).

The northbound and southbound approaches of Airmont Road both provide a dedicated 10 FT wide left turn lane, a dedicated 11 FT wide through lane, and a shared 11 FT wide through/right turn lane. The eastbound and westbound approaches of North DeBaun Avenue both provide a shared 14 FT wide lane for all movements.

A review of the existing analysis reveals that the intersection operates at overall level of service "A" and all movements operate at levels of service "C" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard

North DeBaun Avenue intersects Airmont Road to form a four-leg intersection controlled by a traffic signal. The traffic signal timings were requested from the Town and Rockland County but were not received. The timings were obtained from the *Traffic Impact Study*, prepared by Harry Baker & Associates, dated July 13, 2020, last revised February 8, 2021, which indicates that the traffic signal operates under a three-phase operation with a 75-second background cycle length.

The northbound and southbound approaches of Airmont Road both provide a dedicated left turn lane (11 FT wide northbound lane and 13 FT wide southbound lane), a dedicated through lane (12 FT wide northbound lane and 13 FT wide southbound lane), and a shared through/right turn lane (12 FT wide northbound lane and 11 FT wide southbound lane). The eastbound approach of Montebello Road (CR 64) provides a shared 12 FT wide left turn/through lane and a dedicated 10 FT wide right turn lane while the westbound approach of Rella Boulevard provides a dedicated 11 FT wide left turn lane, a dedicated 10 FT wide through lane, and a dedicated 10 FT wide right turn lane.

A review of the existing analysis reveals that the intersection operates at overall level of service "B" and all movements operate at levels of service "C" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

A review of the existing analysis reveals that the 95th percentile queue length exceeds the storage length for the eastbound right turn lane during the weekday morning and evening peak hours. See Table V for the individual movement 95th percentile queues.

Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway

Executive Boulevard and the Ramapo Hills Professional Center driveway intersect Airmont Road to form a four-leg intersection controlled by a traffic signal. The timings were obtained from the *Traffic Impact Study*, prepared by Harry Baker & Associates, dated July 13, 2020, last revised February 8, 2021, which indicates that the traffic signal operates under a three-phase operation with a 75-second background cycle length.

The northbound approach of Airmont Road (CR 89) provides a dedicated 11 FT wide left turn lane, a 12 FT wide dedicated through lane, and a shared 11 FT wide through/right turn lane, while the southbound approach provides a dedicated 11 FT wide left turn lane, two dedicated 12 FT wide through lanes, and a dedicated 12 FT wide right turn lane. The eastbound approach of Executive Boulevard provides a shared 10 FT wide left turn/through lane and a dedicated 10 FT wide right turn lane. The westbound approach of the Ramapo Hills Professional Center driveway provides a shared 12 FT wide full-movement lane.

A review of the existing analysis reveals that the intersection operates at overall level of service "A" and all movements operate at levels of service "D" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Hemion Road (CR 93) & Dunnigan Drive

Dunnigan Drive intersects Hemion Road to form an unsignalized T-intersection with the westbound approach of Dunnigan Drive operating under stop control. The northbound approach of Hemion Road provides a shared 12 FT wide through/right turn lane, while the southbound approach provides a shared 12 FT wide left turn/through lane. The westbound approach of Dunnigan Drive provides a shared 12 FT wide left turn/right turn lane.

A review of the existing analysis reveals that all movements operate at levels of service "B" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Lafayette Avenue (NYS Route 59) & Brookside Avenue

Brookside Avenue intersects Lafayette Avenue to form an unsignalized T-intersection with the northbound approach of Brookside Avenue operating under stop control. The northbound approach of Brookside Avenue provides a shared 14 FT wide left turn/right turn lane. The eastbound approach of Lafayette Avenue provides a shared 12 FT wide through/right turn lane, while the westbound approach provides a dedicated 12 FT wide left turn lane and a dedicated 12 FT wide right turn lane.

A review of the existing analysis reveals that all movements operate at levels of service "C" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive

Hemion Road and Ryan Mansion Drive intersect Montebello Road to form an unsignalized four-leg intersection with the northbound approach of Hemion Road and the southbound approach of Ryan Mansion Drive operating under stop control. The northbound approach of Hemion Road (12 FT wide), the southbound approach of Ryan Mansion Drive (23 FT wide), and both the eastbound and westbound approaches of Montebello Road (both 11 FT wide) all provide a shared lane for all movements.

A review of the existing analysis reveals that all movements operate at levels of service "D" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway

Dunnigan Drive and the Interstate Waste Services driveway intersect Airmont Road to form an unsignalized four-leg intersection with the eastbound approach of Dunnigan Drive and the westbound approach of the Interstate Waste Services driveway operating under stop control. The northbound and southbound approaches of Airmont Road provide a dedicated 10 FT wide left turn lane, a dedicated 11 FT wide through lane, and a shared 11 FT wide through/right turn lane. The eastbound approach of Dunnigan Drive and the westbound approach of the Interstate Waste Services driveway both provide a shared 27 FT wide lane for all movements.

The CSX freight rail line crosses Airmont Road at the southern leg of the intersection. No train crossings were observed during the MTM count period noted previously. As such, any impacts of the rail crossing on the intersection are anticipated to be minimal.

A review of the existing analysis reveals that all movements operate at levels of service "B" or better during the analyzed peak periods, with the exception of the eastbound left turn/through movement, which operates at level of service "F" during both analyzed peak hours. See Table IV for the individual movement levels of service and delays.

Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard

The Suffern Middle School ingress driveway and Ramapo Cirque Boulevard intersect Hemion Road to form an unsignalized four-leg intersection with the eastbound approach of Ramapo Cirque Boulevard and the westbound approach of the Suffern Middle School ingress driveway operating under stop control. The northbound and southbound approaches of Hemion Road both provide a shared 12 FT wide lane for all movements. The eastbound approach of Ramapo Cirque Boulevard provides a dedicated 15 FT wide left turn lane and a shared 16 FT wide through/right turn lane. The westbound approach of the Suffern Middle School ingress driveway provides one 25 FT wide lane of travel away from the intersection.

A review of the existing analysis reveals that all movements operate at levels of service "C" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Hemion Road (CR 93) & Suffern Middle School Egress Driveway

The Suffern Middle School egress driveway intersects Hemion Road to form an unsignalized T-intersection with the westbound approach of the Suffern Middle School egress driveway operating under stop control. The northbound and southbound approaches of Hemion Road both provide a dedicated 12 FT wide through lane. The westbound approach of the Suffern Middle School egress driveway provides a shared 25 FT wide left turn/right turn lane.

A review of the existing analysis reveals that all movements operate at levels of service "C" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Montebello Road (CR 64) & Suffern Middle School Driveway

The Suffern Middle School driveway intersects Montebello Road to form an unsignalized T-intersection with the northbound approach of the Suffern Middle School driveway operating under stop control. The northbound approach of the Suffern Middle School driveway provides a shared 12 FT wide left turn/right turn lane. The eastbound approach of Montebello Road provides a shared 11 FT wide through/right turn lane, while the westbound approach provides a shared 11 FT wide left turn/through lane.

A review of the existing analysis reveals that all movements operate at levels of service "C" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Montebello Road (CR 64) & Montebello Elementary School Driveway

The Montebello Elementary School driveway intersects Montebello Road to form an unsignalized T-intersection with the northbound approach of the Montebello Elementary School driveway operating under stop control. The northbound approach of the Montebello Elementary School driveway provides a shared 15 FT wide left turn/right turn lane. The eastbound approach of Montebello Road provides a shared 11 FT wide through/right turn lane, while the westbound approach provides a shared 11 FT wide left turn/through lane.

A review of the existing analysis reveals that all movements operate at levels of service "B" or better during the analyzed peak periods. See Table IV for the individual movement levels of service and delays.

Existing Queue Observations vs Synchro Calculations

Queue length conditions at the study intersections were analyzed under the Existing conditions. Queuing conditions were observed by our office on Thursday, May 26th and Thursday, December 8th, 2022. Table VI below compares the existing queue conditions observed with the existing queue lengths calculated in Synchro. It should be noted that the existing queue lengths observed were only during one cycle at the study intersections, rather than over several cycles. Additionally, oversaturated conditions that may be present during certain time periods result in abnormally long cycle lengths that would not be present under normal conditions.

Table VI
Existing Queue Observations vs Synchro Calculations

Intersection	Direction/ Movement		Storage Length	AM PSH	
				Synchro	Observed
Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road (CR 93)	EB	L	75’	233’	100’
		T	-	447’	375’
		R	310’	-	
	WB	L	180’	108’	100’
		T	-	530’	450’
		R	560’	-	
	NB	L	150’	98’	175’
		TR	-	238’	
	SB	L	145’	109’	200’
		TR	-	330’	
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	330’	634’	375’
		T	-	283’	
		R	145’	-	
	WB	L	175’	103’	460’
		T	-	210’	
		R	170’	555’	
	NB	L	140’	50’	270’
		TR	-	402’	
	SB	L	100’	578’	325’
		T	-	549’	
		R	-	34’	
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	120’	208’	500’
		R	-	330’	
	NB	T	-	145’	400’
		R	80’	0’	
	SB	L	150’	153’	145’
		T	-	285’	250’
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	520’	202’	200’
		LT	-	202’	
		R	350’	136’	
	NB	L	105’	305’	200’
		T	-	207’	
	SB	T	-	187’	75’
		R	140’	58’	
Airmont Road (CR 89) & North DeBaun Avenue	NB	L	130’	8’	0’
		TR	-	253’	225’
	SB	L	155’	5’	0’

Table VI (continued)
Existing Queue Observations vs Synchro Calculations

Intersection	Direction/ Movement		Storage Length	AM PSH	
				Synchro	Observed
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	-	73’	100’
		R	140’	253’	200’
	NB	L	290’	63’	50’
		TR	-	20’	50’
	SB	L	290’	8’	100’
		TR	-	195’	200’
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	NB	LTR	-	155’	100’
	SB	LTR	-	3’	25’

FUTURE CONDITIONS

Traffic volumes and operational analyses were developed for both the Build Year 2026 No Build and Build conditions. Additionally, as requested by NYSDOT, traffic volumes and operational analyses were also developed for the Design Year 2036 (ETC+10) No Build and Build conditions. The No Build conditions provide a baseline for assessing the impact of the site development traffic on the roadway system. The process of developing the No Build and Build traffic volumes and the subsequent analyses is outlined below.

Regardless of whether the subject site is developed or not, traffic volumes on the surrounding roadways are expected to increase as a result of developments throughout the region. A growth rate for roadways within the study area was assumed to be 2.0% per year from 2022 to 2026.

Historic average annual daily traffic (AADT) data obtained from the NYSDOT Highway Data services website was reviewed to evaluate the appropriate growth rate for traffic volumes from 2026 to 2036. AADT data for the approximate 15-year period from 2004 to 2019 along Lafayette Avenue (NYS Route 59), Airmont Road (CR 89), and Hemion Road (CR 93) indicates that traffic volumes remained generally consistent or slightly declined. As such, the growth rate from 2026 to 2036 was assumed to be 0.5% per year, which is anticipated to be a conservative representation of changes in traffic patterns within the area.

Through consultation with the Village of Suffern, the Village of Montebello, and the Village of Airmont Planning Board staff, there are nine developments in the vicinity of the site that have been approved but not yet constructed that are identified as a potential significant traffic generator, shown below. The Adjacent Development Traffic Volumes passing the site are shown on Figure 4. It was assumed that the background growth rate was adequate to account for the traffic associated with all developments not listed hereafter.

- A development consisting of a two-story medical office building, located at 5 Hemion Road, has been approved. Projections of the associated traffic volumes were taken from Figure 6 of the traffic study, prepared by Harry Baker & Associates, last revised July 13, 2020.

- A development consisting of a 200-bed assisted living facility, a 10,000 SF medical office building, and a 14,698 SF pharmacy with drive-through window, located on the north side of Lafayette Avenue (NYS Route 59) between Campbell Avenue/Hemion Road and Hillcrest Road, has been approved. Projections of the associated traffic volumes were taken from Figures 9 and 10 of the *Traffic Impact Study*, prepared by Maser Consulting PA, dated April 15, 2020.

- A development consisting of a 4,429 SF Panera, located in the northeast quadrant of the intersection of Airmont Road (CR 89) and DeBaun Avenue in Airmont, NY, has been approved. Projections of the associated traffic volumes taken from Figures 7-10 of the *Traffic Impact and Parking Assessment*, prepared by this firm, dated October 31, 2018.

- A development consisting of 199,000 SF of warehouse space, 6,000 SF of ancillary office space, and 101,440 SF of self-storage space, located at 100 & 300 Rella Boulevard in Montebello, NY, has been approved. Projections of the associated traffic volumes were taken from the *100 & 300 Rella Boulevard – Updated Site Plan (Traffic) Memorandum*, prepared by Colliers Engineering & Design, dated June 3, 2022.

- An approximate 102,390 SF expansion of the existing Manhattan Beer Distributor warehouse located at 10-20 Dunnigan Drive, Montebello, NY, has been approved and is under construction. Projections of the associated traffic volumes were developed using the Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition* for Land Use Code (LUC) 150 – Warehousing.

- A development known as Montebello Gateway consisting of 47,642 SF of office space, located at the northwest quadrant of the intersection of North Airmont Road and Executive Boulevard in Montebello, NY has been approved. Projections of the associated traffic volumes were taken from Figures 7C-7D of the *Traffic Impact Study* prepared by Harry Baker & Associates, dated July 13, 2020, last revised February 8, 2021.

- A development consisting of 78,101 SF of warehouse space and 2,000 SF of office space, located at 9 Executive Boulevard in Montebello, NY, has been approved and is under construction. Projections of the associated traffic volumes were developed using the Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition* for Land Use Code (LUC) 150 – Warehousing and 710 – General Office Building.

- A development known as the Allegro Office Building consisting of 10,350 SF of medical office space and 12,000 SF of office space, located at 10 South DeBaun Avenue in the Village of Airmont, NY, has been approved. Projections of the associated traffic volumes were obtained from the *Traffic Impact Study*, prepared by Maser Consulting, P.A, dated July 27, 2015, and *Supplemental Review*, prepared by Maser Consulting, P.A, dated January 8, 2018.

- A development consisting of 29,426 SF of warehouse space and 5,620 SF of office space, located at 124-130 NYS Route 59 in the Village of Airmont, NY, has been approved. Projections of the associated traffic volumes were obtained from the *Traffic Impact Study*, prepared by Harry Baker & Associates, dated April 5, 2019, revised December 7, 2020.

Future 2026 No Build traffic volumes were developed by applying the background growth rate of 2.0% for four (4) years to the study area roadways existing traffic volumes and adding the adjacent development traffic volumes. Figure 5, in Appendix A, shows the 2026 No Build traffic volumes. Future 2036 No Built traffic volumes were developed by applying the background growth rate of 0.5% for an additional ten (10) years to the Future 2026 No Build traffic volumes. Figure 12, in Appendix A, shows the 2036 No Build traffic volumes.

Traffic Generation

Trip generation projections for The Project were prepared utilizing trip generation research data as published under Land Use Code (LUC) 150 – Warehousing in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation, 11th Edition.* This publication sets forth trip generation rates based on traffic counts conducted at research sites throughout the country. It should be noted that consistent with data published by ITE for LUC 150, 13% of the AM site generated trips and 15% of the PM site generated trips were assumed to be trucks. Table VI summarizes the trip generation for each of the three proposed buildings as well as the total trip generation for The Project. It should be noted that conservatively, no credit was taken for the use of mass transit or ride sharing, which would result in an overall decrease in vehicular trip generation to/from the site. It is anticipated that future transit access to the site will be considered and coordinated with Transport of Rockland.

Trip generation projects for daily traffic broken down by hour were also prepared using data from the *Trip Generation, 11th Edition* appendices as published on ITE's website. The daily trip generation rates for The Project are included in Appendix D. For LUC 150, the peak period for passenger car traffic generally occurs from 6:00 AM to 9:00 AM and corresponds with the weekday morning peak hour for the adjacent street network, while the peak period for passenger car traffic exiting generally occurs from 3:00 PM to 6:00 PM and corresponds with the weekday evening peak hour for the adjacent street network. Truck traffic generally peaks between 9:00 AM and 12:00 PM, immediately following the morning peak period for passenger car traffic.

Table VII
Proposed Trip Generation

Use	Trip Type	AM PSH			PM PSH			SAT PSH		
		In	Out	Total	In	Out	Total	In	Out	Total
Building 1 – 963,100 SF	Total	126	38	164	48	125	173	31	17	48
	Trucks	10	9	19	15	14	29	-	-	-
	Cars	116	29	145	33	111	144	-	-	-
Building 2 – 170,500 SF	Total	34	10	44	13	34	47	6	3	9
	Trucks	2	1	3	3	2	5	-	-	-
	Cars	32	9	41	10	32	42	-	-	-
Building 3 – 88,200 SF	Total	26	8	34	10	27	37	3	1	4
	Trucks	1	1	2	2	1	3	-	-	-
	Cars	25	7	32	8	26	34	-	-	-
Total	**Total**	**186**	**56**	**242**	**71**	**186**	**257**	**40**	**21**	**61**
	Trucks	**13**	**11**	**24**	**20**	**17**	**37**	**-**	**-**	**-**
	Cars	**173**	**45**	**218**	**51**	**169**	**220**	**-**	**-**	**-**

As can be seen above, the proposed site is projected to generate 242 trips during the weekday morning peak hour, 257 trips during the weekend evening peak hour, and 61 trips during the Saturday peak hour. The number of new trips on Saturday represents approximately 25% of the total new trips during the weekday morning and evening peak hours and also falls below the industry accepted standard of a significant increase in traffic of 100 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE, "it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways' peak hour or the development's peak hour," hence, it is not anticipated that The Project will result in a significant impact on operating conditions for the surround roadway network during the Saturday peak hour. As such, the weekend peak hour was not analyzed.

Once the magnitude of traffic to be generated by the site is known, it is necessary to assign that traffic to the adjacent street system. The distribution of new traffic to the surrounding roadways is based on the location of primary arterial roadways, major signalized intersections and existing traffic patterns. Table VIII below indicates the percentile distribution of site generated traffic on the adjacent roadway network.

Table VIII
Distribution of Site Generated Traffic

Trip Type	Direction	Roadway	Distribution	
			Enter	Exit
Car	East	I-287 WB/I-87 NB	20%	20%
	West	I-287 EB/I-87 SB	20%	20%
	North	Airmont Road (CR 89)	15%	15%
	West	Lafayette Avenue (NYS Route 59)	15%	15%
	South	Campbell Avenue	10%	10%
	West	Montebello Road (CR 64)	10%	10%
	South	Brookside Avenue	5%	5%
	East	Lafayette Avenue (NYS Route 59)	5%	5%
Truck	East	I-287 WB/I-87 NB	40%	40%
	West	I-287 EB/I-87 SB	40%	40%
	West	Lafayette Avenue (NYS Route 59)	20%	20%

Trucks were routed towards I-87/I-287 or NYS Route 17, which are designated as truck routes in the October 2020 edition of the NYSDOT *Official Description of Designated Qualifying and Access Highways*. All trucks must travel to/from the site via Lafayette Avenue due to Montebello Road's weight restriction. Trucks shall be restricted to left-in/right-out movements at Old Mill Road. Regulatory signage and pavement markings will be provided to direct trucks to turn right onto Hemion Road. Further, drivers will be informed of the necessary restriction associated with travel to/from the site.

Located in Appendix A, Figures 6-10 illustrate the Car Traffic Trip Distribution, Car Site Generated Volumes, Truck Traffic Trip Distribution, Truck Site Generated Volumes, and the Total Site Generated Volumes, respectively. The Total Site Generated Volumes assigned to the study area network were added to the Future 2026 No Build traffic volumes to generate the Future 2026 Build traffic volumes, which are shown in Figure 11.

Future Roadway Improvements

The Lower Hudson Transit Link Integrated Corridor Management & Ramp Metering project is currently under construction and is anticipated to be substantially completed by June 2023. The goal of this project is to encourage public transit use with ramp metering, traffic signal improvements, and transit stop improvements. These signal improvements are the bus signal pre-emption at the intersections of Lafayette Avenue & Hemion Road and Lafayette Avenue & Airmont Road. This pre-emption is included in the Existing, No-Build, and Build analyses.

Future Capacity Analysis

Operational conditions at the study intersections were analyzed under the No Build and Build conditions and are summarized in Table IX through XII. Mitigation measures were reviewed and considered where level of service degradations, significant increases in delay and/or queue lengths extending beyond available storage were observed.

Table IX
2026 - Future AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (129)	1.13	F (205)	1.33	F (102)	1.02
		T/TR	F (95)	1.07	F (101)	1.09	C (35)	0.53
		R	A (1)	0.08	A (1)	0.08	-	-
	WB	L	D (47)	0.77	D (48)	0.78	C (29)	0.51
		T	F (119)	1.15	F (126)	1.10	F (118)	1.12
		R	A (2)	0.14	A (5)	0.26	A (4)	0.24
	NB	L	D (41)	0.71	D (41)	0.71	D (55)	0.75
		TR	D (44)	0.70	D (45)	0.72	E (60)	0.76
	SB	L	C (33)	0.60	D (41)	0.73	E (73)	0.66
		TR	E (59)	0.90	E (54)	0.91	E (75)	0.94
	Overall		**E (78)**	**1.15**	**F (86)**	**1.33**	**E (68)**	**1.12**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (151)	1.20	F (180)	1.28	E (68)	0.79
		T/TR	D (45)	0.62	D (44)	0.62	D (48)	0.68
		R	A (1)	0.03	A (1)	0.03	-	-
	WB	L	D (38)	0.34	D (38)	0.34	D (39)	0.37
		T	E (68)	0.81	E (69)	0.82	E (68)	0.82
		R	F (94)	1.08	F (90)	1.07	E (70)	1.00
	NB	L	D (40)	0.15	D (41)	0.15	D (38)	0.15
		TR	E (59)	0.80	E (60)	0.80	E (64)	0.85
	SB	L	F (160)	1.21	F (163)	1.22	F (128)	1.12
		T	F (96)	1.01	F (96)	1.01	F (97)	1.01
		R	A (6)	0.58	A (8)	0.64	A (8)	0.64
	Overall		**F (83)**	**1.21**	**F (86)**	**1.28**	**E (67)**	**1.12**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (21)	0.66	B (19)	0.62	B (19)	0.62
		R	D (45)	0.94	D (50)	0.96	D (50)	0.96
	NB	T	F (54)	1.03	F (94)	1.13	F (81)	1.10
	SB	L	D (36)	0.79	D (36)	0.79	D (39)	0.83
		T	C (24)	0.54	C (26)	0.57	C (26)	0.57
	Overall		**D (37)**	**1.03**	**D (49)**	**1.13**	**D (46)**	**1.10**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	D (44)	0.88	D (44)	0.88	D (44)	0.88
		LT	D (44)	0.88	D (44)	0.88	D (44)	0.88
		R	C (30)	0.81	D (38)	0.88	D (38)	0.88
	NB	L	F (399)	1.82	F (414)	1.85	F (313)	1.62
		T	B (17)	0.76	B (17)	0.77	B (18)	0.77
	SB	T	C (25)	0.81	C (29)	0.82	D (40)	0.89
		R	A (6)	0.55	A (7)	0.56	A (8)	0.59
	Overall		**E (64)**	**1.82**	**E (67)**	**1.85**	**E (60)**	**1.62**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table IX (continued)
2026 - Future AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (34)	0.40	C (34)	0.40	-	-
	WB	LTR	C (30)	0.14	C (30)	0.14	-	-
	NB	L	A (4)	0.10	A (4)	0.10	-	-
		TR	B (12)	0.72	B (13)	0.73	-	-
	SB	L	A (7)	0.08	A (7)	0.08	-	-
		TR	A (3)	0.65	A (3)	0.67	-	-
	Overall		**A (9)**	**0.72**	**A (9)**	**0.73**	**-**	**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (21)	0.31	C (21)	0.33	-	-
		R	C (27)	0.78	C (27)	0.79	-	-
	WB	L	B (19)	0.03	C (24)	0.05	-	-
		T	B (19)	0.04	B (18)	0.04	-	-
		R	B (19)	0.03	B (18)	0.03	-	-
	NB	L	B (13)	0.56	B (18)	0.68	-	-
		TR	A (5)	0.60	A (5)	0.61	-	-
	SB	L	B (11)	0.08	B (12)	0.09	-	-
		TR	B (19)	0.54	B (20)	0.56	-	-
	Overall		**B (15)**	**0.78**	**B (16)**	**0.79**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (35)	0.17	C (35)	0.17	-	-
		T	C (31)	0.25	C (31)	0.25	-	-
	WB	LTR	C (34)	0.02	C (34)	0.02	-	-
	NB	L	A (4)	0.46	A (4)	0.46	-	-
		TR	A (1)	0.40	A (1)	0.42	-	-
	SB	L	A (4)	0.00	A (4)	0.00	-	-
		T	A (6)	0.41	A (6)	0.42	-	-
		R	A (4)	0.07	A (4)	0.07	-	-
	Overall		**A (4)**	**0.46**	**A (4)**	**0.46**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (16)	0.085	c (18)	0.101	-	-
	SB	L	a (9)	0.018	a (10)	0.019	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	a (10)	0.100	a (10)	0.102	-	-
	NB	LR	c (18)	0.347	c (20)	0.422	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table IX (continued)
2026 - Future AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	-	e (38)	0.870
	WB	LTR	b (10)	0.323	b (11)	0.412	f (58)	0.971
	NB	LTR	f (123)	1.121	f (300)	1.547	d (27)	0.739
	SB	LTR	e (43)	0.055	f (65)	0.084	b (12)	0.015
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (87)	0.487	f (87)	0.487	-	-
		R	b (14)	0.046	b (14)	0.046	-	-
	WB	LTR	c (16)	0.036	c (16)	0.036	-	-
	NB	L	b (11)	0.036	b (11)	0.036	-	-
	SB	L	b (11)	0.009	b (11)	0.009	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	d (28)	0.089	d (35)	0.111	-	-
		R	b (13)	0.038	b (14)	0.044	-	-
	NB	L	a (9)	0.018	a (10)	0.020	-	-
	SB	L	a (9)	0.078	a (9)	0.081	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	c (18)	0.175	c (20)	0.204	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (9)	0.015	a (9)	0.015	-	-
	NB	LR	c (22)	0.388	d (26)	0.444	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (8)	0.071	a (9)	0.072	-	-
	NB	LR	b (14)	0.180	b (15)	0.194	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	d (35)	0.243	-	-
	NB	L	-	-	b (11)	0.099	-	-
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	d (29)	0.210	-	-
	NB	L	-	-	a (10)	0.097	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table X
2026 - Future PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (83)	0.99	F (100)	1.05	E (74)	0.92
		T/TR	D (39)	0.84	D (39)	0.85	C (25)	0.48
		R	A (1)	0.12	A (1)	0.12	-	-
	WB	L	B (18)	0.40	B (18)	0.40	B (19)	0.29
		T	F (86)	1.07	F (87)	1.07	F (84)	1.04
		R	A (1)	0.12	A (2)	0.17	A (2)	0.17
	NB	L	D (39)	0.69	D (39)	0.69	D (53)	.74
		TR	E (76)	0.95	F (81)	0.97	E (76)	0.88
	SB	L	D (43)	0.74	F (97)	1.04	E (67)	0.69
		TR	F (149)	1.20	F (201)	1.34	F (149)	1.19
	Overall		**E (69)**	**1.20**	**F (83)**	**1.34**	**E (69)**	**1.19**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (218)	1.36	F (287)	1.53	F (94)	0.96
		T/TR	D (48)	0.69	D (48)	0.70	E (58)	0.84
		R	A (2)	0.13	A (2)	0.13	-	-
	WB	L	D (40)	0.54	D (41)	0.55	D (51)	0.70
		T	E (73)	0.87	E (73)	0.87	E (67)	0.84
		R	E (65)	0.99	E (64)	0.99	D (47)	0.92
	NB	L	F (100)	0.78	F (102)	0.79	F (88)	0.72
		TR	E (67)	0.79	E (64)	0.79	E (70)	0.85
	SB	L	F (122)	1.09	F (123)	1.09	F (110)	1.04
		T	E (69)	0.89	E (69)	0.89	E (69)	0.89
		R	B (11)	0.65	B (12)	0.69	B (13)	0.70
	Overall		**E (78)**	**1.36**	**F (88)**	**1.53**	**E (64)**	**1.04**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (25)	0.66	C (24)	0.62	C (24)	0.61
		R	D (35)	0.88	D (37)	0.89	C (35)	0.89
	NB	T	B (11)	0.69	B (13)	0.74	A (10)	0.69
	SB	L	C (33)	0.80	C (33)	0.80	D (43)	0.97
		T	B (15)	0.59	B (16)	0.61	B (11)	0.61
	Overall		**B (20)**	**0.88**	**C (21)**	**0.89**	**B (19)**	**0.97**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	C (35)	0.80	C (35)	0.81	D (40)	0.84
		LT	C (35)	0.80	C (35)	0.81	D (40)	0.84
		R	C (27)	0.80	C (27)	0.81	C (27)	0.81
	NB	L	F (81)	1.08	F (95)	1.12	E (78)	1.07
		T	A (5)	0.44	A (4)	0.44	A (5)	0.43
	SB	T	F (96)	1.01	F (95)	1.02	F (95)	1.02
		R	C (23)	0.68	C (24)	0.72	C (23)	0.71
	Overall		**D (47)**	**1.08**	**D (48)**	**1.12**	**D (47)**	**1.07**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table X (continued)
2026 - Future PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (33)	0.37	C (33)	0.37	-	-
	WB	LTR	C (34)	0.46	C (34)	0.46	-	-
	NB	L	A (6)	0.13	A (6)	0.13	-	-
		TR	B (16)	0.75	B (17)	0.77	-	-
	SB	L	A (9)	0.19	A (10)	0.19	-	-
		TR	A (7)	0.70	A (7)	0.72	-	-
	Overall		**B (12)**	**0.75**	**B (13)**	**0.77**	**-**	**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (29)	0.44	C (28)	0.48	-	-
		R	C (25)	0.65	C (25)	0.69	-	-
	WB	L	C (25)	0.21	C (24)	0.19	-	-
		T	C (24)	0.09	C (23)	0.08	-	-
		R	C (25)	0.21	C (24)	0.19	-	-
	NB	L	C (26)	0.83	D (39)	0.90	-	-
		TR	A (7)	0.48	A (8)	0.50	-	-
	SB	L	A (8)	0.08	A (9)	0.09	-	-
		TR	B (15)	0.58	B (17)	0.61	-	-
	Overall		**B (16)**	**0.83**	**B (18)**	**0.90**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (32)	0.31	C (31)	0.29	-	-
		R	C (30)	0.53	C (30)	0.53	-	-
	WB	LTR	C (30)	0.08	C (31)	0.11	-	-
	NB	L	A (6)	0.22	A (6)	0.23	-	-
		TR	A (1)	0.44	A (1)	0.44	-	-
	SB	L	A (5)	0.01	A (5)	0.01	-	-
		T	A (8)	0.52	A (8)	0.54	-	-
		R	A (5)	0.04	A (5)	0.04	-	-
	Overall		**A (7)**	**0.53**	**A (7)**	**0.54**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (16)	0.148	c (18)	0.172	-	-
	SB	L	a (9)	0.006	a (9)	0.007	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	b (12)	0.269	b (13)	0.286	-	-
	NB	LR	d (29)	0.510	d (34)	0.565	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table X (continued)
2026 - Future PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	-	b (14)	0.438
	WB	LTR	a (8)	0.172	a (8)	0.188	d (27)	0.753
	NB	LTR	f (60)	0.956	f (118)	1.152	e (38)	0.877
	SB	LTR	c (20)	0.043	c (22)	0.051	b (11)	0.022
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (127)	0.794	f (228)	1.050	-	-
		R	c (16)	0.129	c (16)	0.129	-	-
	WB	LTR	b (14)	0.043	b (14)	0.043	-	-
	NB	L	b (12)	0.033	b (12)	0.033	-	-
	SB	L	b (13)	0.007	b (13)	0.007	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	c (19)	0.096	c (21)	0.113	-	-
		R	b (11)	0.014	b (11)	0.014	-	-
	NB	L	a (8)	0.012	a (8)	0.012	-	-
	SB	L	a (9)	0.034	a (9)	0.036	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	b (14)	0.160	c (15)	0.182	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (8)	0.023	a (8)	0.025	-	-
	NB	LR	c (16)	0.180	c (18)	0.205	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (9)	0.018	a (9)	0.019	-	-
	NB	LR	b (13)	0.204	b (14)	0.222	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	d (34)	0.427	-	-
	NB	L	-	-	b (11)	0.052	-	-
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	d (32)	0.490	-	-
	NB	L	-	-	a (9)	0.023	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XI
2036 - Design Horizon Year AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			Design Year No Build		Design Year Build		Design Year Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (154)	1.20	F (234)	1.40	F (119)	1.08
		T	F (120)	1.15	F (125)	1.16	D (36)	0.56
		R	A (1)	0.09	A (1)	0.09	-	-
	WB	L	D (53)	0.81	D (55)	0.82	C (31)	0.57
		T	F (147)	1.22	F (153)	1.23	F (143)	1.19
		R	A (2)	0.15	A (4)	0.26	A (4)	0.25
	NB	L	D (43)	0.74	D (44)	0.75	E (58)	0.78
		TR	D (44)	0.70	D (45)	0.73	E (60)	0.77
	SB	L	C (34)	0.63	D (44)	0.76	E (74)	0.68
		TR	E (60)	0.91	E (61)	0.92	E (77)	0.95
	Overall		**F (92)**	**1.22**	**F (100)**	**1.40**	**E (76)**	**1.19**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (176)	1.26	F (208)	1.34	E (72)	0.83
		T	D (45)	0.64	D (45)	0.64	D (49)	0.70
		R	A (1)	0.03	A (1)	0.03	-	-
	WB	L	D (38)	0.35	D (38)	0.35	D (39)	0.39
		T	E (69)	0.83	E (70)	0.83	E (69)	0.83
		R	F (104)	1.11	F (100)	1.10	E (77)	1.03
	NB	L	D (41)	0.18	D (41)	0.18	D (39)	0.17
		TR	E (63)	0.85	E (64)	0.85	E (70)	0.91
	SB	L	F (194)	1.30	F (198)	1.31	F (162)	1.22
		T	F (92)	1.00	F (93)	1.00	F (92)	1.00
		R	A (6)	0.60	A (9)	0.66	A (9)	0.67
	Overall		**F (92)**	**1.30**	**F (96)**	**1.34**	**E (73)**	**1.22**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (20)	0.66	B (19)	0.64	B (19)	0.64
		R	D (47)	0.95	E (57)	0.99	E (57)	0.99
	NB	T	F (99)	1.15	F (133)	1.23	F (109)	1.17
	SB	L	C (35)	0.80	C (35)	0.80	D (37)	0.87
		T	C (20)	0.58	C (21)	0.60	C (21)	0.60
	Overall		**D (48)**	**1.15**	**E (60)**	**1.23**	**D (53)**	**1.17**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	D (45)	0.89	D (46)	0.90	D (46)	0.90
		LT	D (45)	0.89	D (46)	0.90	D (46)	0.90
		R	C (31)	0.82	D (40)	0.90	D (40)	0.90
	NB	L	F (437)	1.91	F (455)	1.95	F (348)	1.71
		T	B (19)	0.81	B (18)	0.81	B (19)	0.81
	SB	T	C (34)	0.88	D (39)	0.88	E (64)	0.96
		R	A (7)	0.58	A (8)	0.60	A (10)	0.63
	Overall		**E (71)**	**1.91**	**E (75)**	**1.95**	**E (70)**	**1.71**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XI (continued)
2036 - Design Horizon Year AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			Design Year No Build		Design Year Build		Design Year Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (34)	0.42	C (34)	0.42	-	-
	WB	LTR	C (30)	0.15	C (30)	0.15	-	-
	NB	L	A (5)	0.12	A (5)	0.12	-	-
		TR	B (14)	0.75	B (14)	0.77	-	-
	SB	L	A (8)	0.09	A (8)	0.09	-	-
		TR	A (6)	0.68	A (7)	0.70	-	-
	Overall		**B (11)**	**0.75**	**B (11)**	**0.77**	**-**	**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (21)	0.32	C (21)	0.33	-	-
		R	C (28)	0.80	C (28)	0.80	-	-
	WB	L	B (18)	0.03	C (24)	0.05	-	-
		T	B (18)	0.04	B (18)	0.03	-	-
		R	B (18)	0.03	B (18)	0.03	-	-
	NB	L	B (15)	0.62	C (24)	0.75	-	-
		TR	A (6)	0.65	A (7)	0.66	-	-
	SB	L	B (12)	0.09	B (12)	0.10	-	-
		TR	C (20)	0.58	C (21)	0.61	-	-
	Overall		**B (16)**	**0.80**	**B (17)**	**0.80**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (35)	0.18	C (35)	0.18	-	-
		T	C (31)	0.25	C (31)	0.25	-	-
	WB	LTR	C (34)	0.02	C (34)	0.02	-	-
	NB	L	A (4)	0.49	A (4)	0.50	-	-
		TR	A (1)	0.42	A (1)	0.44	-	-
	SB	L	A (4)	0.00	A (4)	0.00	-	-
		T	A (6)	0.43	A (6)	0.44	-	-
		R	A (4)	0.07	A (4)	0.07	-	-
	Overall		**A (4)**	**0.49**	**A (4)**	**0.50**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (17)	0.090	c (19)	0.107	-	-
	SB	L	a (9)	0.018	a (10)	0.020	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	b (10)	0.108	a (10)	0.110	-	-
	NB	LR	c (19)	0.408	c (22)	0.460	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XI (continued)
2036 - Design Horizon Year AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			Design Year No Build		Design Year Build		Design Year Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	-	e (44)	0.925
	WB	LTR	b (10)	0.344	b (11)	0.435	f (75)	1.02
	NB	LTR	f (168)	1.241	f (380)	1.727	d (30)	0.787
	SB	LTR	f (51)	0.051	f (80)	0.080	b (12)	0.010
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (90)	0.513	f (890)	0.513	-	-
		R	b (14)	0.048	b (15)	0.053	-	-
	WB	LTR	c (17)	0.039	c (17)	0.039	-	-
	NB	L	b (11)	0.036	b (11)	0.040	-	-
	SB	L	b (12)	0.010	b (12)	0.010	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	d (31)	0.107	d (39)	0.134	-	-
		R	b (13)	0.043	b (15)	0.050	-	-
	NB	L	a (9)	0.021	a (10)	0.023	-	-
	SB	L	a (9)	0.085	a (9)	0.087	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	c (18)	0.192	c (21)	0.223	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (9)	0.015	a (9)	0.016	-	-
	NB	LR	c (24)	0.429	d (29)	0.490	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (9)	0.076	a (9)	0.077	-	-
	NB	LR	b (14)	0.197	c (15)	0.212	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	e (38)	0.264	-	-
	NB	L	-	-	b (11)	0.102	-	-
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	d (32)	0.229	-	-
	NB	L	-	-	a (10)	0.099	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XII
2036 - Design Horizon Year PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			Design Year No Build		Design Year Build		Design Year Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (95)	1.03	F (114)	1.10	E (72)	0.91
		T	D (43)	0.89	D (43)	0.89	C (26)	0.50
		R	A (1)	0.13	A (1)	013	-	-
	WB	L	C (21)	0.45	C (21)	0.45	C (20)	0.32
		T	F (103)	1.12	F (103)	1.12	F (107)	1.11
		R	A (1)	0.13	A (2)	0.18	A (2)	0.18
	NB	L	D (41)	0.72	D (41)	0.72	D (55)	0.77
		TR	F (89)	1.00	F (93)	1.02	F (85)	0.93
	SB	L	D (45)	0.76	F (106)	1.07	E (67)	0.70
		TR	F (169)	1.25	F (225)	1.40	F (166)	1.23
	Overall		**E (80)**	**1.25**	**F (95)**	**1.40**	**E (78)**	**1.23**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (252)	1.45	F (321)	1.61	F (107)	1.01
		T	D (49)	0.71	D (49)	0.72	E (61)	0.87
		R	A (3)	0.14	A (3)	0.14	-	-
	WB	L	D (42)	0.58	D (42)	0.59	E (57)	0.76
		T	E (73)	0.88	E (74)	0.88	E (66)	0.84
		R	E (72)	1.02	E (71)	1.02	D (50)	0.94
	NB	L	F (136)	0.93	F (137)	0.93	F (139)	0.93
		TR	E (67)	0.83	E (68)	0.83	E (86)	0.90
	SB	L	F (156)	1.19	F (158)	1.19	F (143)	1.15
		T	F (86)	0.93	F (88)	0.93	F (88)	0.93
		R	B (13)	0.68	B (15)	0.72	B (16)	0.73
	Overall		**F (90)**	**1.45**	**F (100)**	**1.61**	**E (74)**	**1.15**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (24)	0.66	C (23)	0.62	C (23)	0.62
		R	D (36)	0.89	D (38)	0.90	D (36)	0.89
	NB	T	B (14)	076	B (17)	0.81	B (12)	0.74
	SB	L	C (33)	0.81	C (33)	0.81	F (50)	1.02
		T	B (16)	0.62	B (17)	0.65	B (11)	0.65
	Overall		**C (21)**	**0.89**	**C (22)**	**0.90**	**C (21)**	**1.02**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	C (35)	0.81	D (36)	0.82	D (43)	0.86
		LT	C (35)	0.81	D (36)	0.82	D (43)	0.86
		R	C (30)	0.83	C (31)	0.84	C (32)	0.85
	NB	L	F (98)	1.13	F (112)	1.17	F (93)	1.11
		T	A (5)	0.47	A (5)	0.47	A (6)	0.46
	SB	T	F (92)	1.10	F (96)	1.11	F (90)	1.10
		R	C (25)	0.73	C (27)	0.77	C (25)	0.75
	Overall		**D (49)**	**1.13**	**D (51)**	**1.17**	**D (49)**	**1.11**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XII (continued)
2036 - Design Horizon Year PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			Design Year No Build		Design Year Build		Design Year Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (33)	0.38	C (33)	0.38	-	-
	WB	LTR	C (35)	0.46	C (35)	0.46	-	-
	NB	L	A (6)	0.14	A (6)	0.14	-	-
		TR	B (17)	0.78	B (18)	0.81	-	-
	SB	L	B (10)	0.20	B (11)	0.20	-	-
		TR	A (8)	0.74	A (8)	0.76	-	-
	Overall		**B (14)**	**0.78**	**B (14)**	**0.81**	**-**	**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (28)	0.45	C (28)	0.49	-	-
		R	C (25)	0.67	C (25)	0.70	-	-
	WB	L	C (25)	0.21	C (23)	0.19	-	-
		T	C (24)	0.09	C (22)	0.08	-	-
		R	C (25)	0.21	C (23)	0.19	-	-
	NB	L	D (42)	0.92	E (62)	0.99	-	-
		TR	A (8)	0.51	B (14)	0.53	-	-
	SB	L	A (8)	0.09	A (10)	0.10	-	-
		TR	B (16)	0.62	B (18)	0.65	-	-
	Overall		**B (18)**	**0.92**	**C (23)**	**0.99**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (32)	0.31	C (31)	0.30	-	-
		R	C (30)	0.53	C (30)	0.53	-	-
	WB	LTR	C (30)	0.08	C (31)	0.11	-	-
	NB	L	A (6)	0.24	A (6)	0.25	-	-
		TR	A (1)	0.46	A (1)	0.46	-	-
	SB	L	A (5)	0.01	A (5)	0.01	-	-
		T	A (8)	0.55	A (9)	0.57	-	-
		R	A (5)	0.04	A (5)	0.04	-	-
	Overall		**A (7)**	**0.55**	**A (7)**	**0.57**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (16)	0.161	c (19)	0.188	-	-
	SB	L	a (9)	0.006	a (9)	0.007	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	b (13)	0.293	b (13)	0.312	-	-
	NB	LR	d (34)	0.572	e (40)	0.630	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XII (continued)
2036 - Design Horizon Year PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			Design Year No Build		Design Year Build		Design Year Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	-	c (15)	0.465
	WB	LTR	a (8)	0.172	a (9)	0.198	d (31)	0.800
	NB	LTR	f (84)	1.044	f (156)	1.249	e (47)	0.927
	SB	LTR	c (21)	0.047	c (24)	0.055	b (11)	0.023
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f	-	f	-	-	-
		R	c (16)	0.135	c (17)	0.150	-	-
	WB	LTR	b (14)	0.046	c (15)	0.050	-	-
	NB	L	b (12)	0.036	b (12)	0.037	-	-
	SB	L	b (13)	0.007	b (14)	0.008	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	c (20)	0.106	c (23)	0.125	-	-
		R	b (11)	0.014	b (11)	0.015	-	-
	NB	L	a (8)	0.013	a (8)	0.013	-	-
	SB	L	a (9)	0.036	a (9)	0.039	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	b (14)	0.176	c (16)	0.200	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (8)	0.024	a (8)	0.026	-	-
	NB	LR	c (17)	0.198	c (19)	0.227	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (9)	0.020	a (9)	0.021	-	-
	NB	LR	b (13)	0.222	b (14)	0.242	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	e (39)	0.464	-	-
	NB	L	-	-	b (11)	0.054	-	-
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	e (35)	0.522	-	-
	NB	L	-	-	a (9)	0.024	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Future Queue Analysis

Queue length conditions at the study intersections were analyzed under the No Build and Build conditions. The 95th percentile queues for each study peak hour are summarized in Tables XIII and XIV below.

Table XIII
2026 - Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				No Build	Build	Build w/ Mit.	No Build	Build	Build w/ Mit.
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	475’	292’	355’	369’	306’	329’	360’
		T	-	623’	623’	262’	635’	635’	231’
		R	310’	0’	0’	-	10’	10’	-
	WB	L	180’	161’	161’	128’	24’	68’	76’
		T	-	723’	723’	791’	828’	828’	934’
		R	560’	5’	31’	30’	8’	24’	22’
	NB	L	150’	113’	115’	158’	152’	152’	224’
		TR	-	274’	294’	388’	296’	306’	468’
	SB	L	175’	126’	145’	128’	175’	279’	164’
		TR	-	373’	402’	535’	447’	524’	691’
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	330’	851’	910’	361’	1008’	1147’	529’
		T	-	332’	334’	358’	442’	431’	526’
		R	145’	-	-	-	14’	14’	-
	WB	L	175’	109’	109’	109’	161’	161’	160’
		T	-	243’	252’	253’	358’	360’	358’
		R	170’	728’	715’	648’	629’	629’	541’
	NB	L	140’	56’	57’	56’	128’	129’	139’
		TR	140’	473’	481’	511’	469’	472’	551’
	SB	L	100’	805’	816’	784’	764’	768’	816’
		T	-	585’	589’	583’	994’	999’	1069’
		R	-	62’	52’	92’	267’	306’	366’
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	120’	225’	215’	215’	200’	195’	195’
		R	-	390’	438’	438’	260’	280’	273’
	NB	T	-	335’	480’	433’	115’	135’	108’
		R	80’	0’	0’	0’	0’	0’	0’
	SB	L	150’	160’	158’	165’	153’	150’	165’
		T	-	310’	315’	305’	295’	300’	200’
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	520’	230’	223’	233’	273’	278’	330’
		LT	-	231’	234’	234’	275’	282’	333’
		R	350’	175’	204’	204’	240’	249’	270’
	NB	L	105’	346’	332’	333’	311’	307’	333’
		T	-	255’	252’	256’	20’	19’	19’
	SB	T	-	159’	152’	188’	460’	461’	434’
		R	140’	0’	0’	12’	251’	274’	250’

Table XIII (continued)
2026 - Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				No Build	Build	Build w/ Mit.	No Build	Build	Build w/ Mit.
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	-	98’	98’	-	90’	90’	-
	WB	LTR		33’	33’	-	115’	115’	-
	NB	L	130’	8’	8’	-	10’	10’	-
		TR	-	310’	318’	-	348’	373’	-
	SB	L	155’	5’	5’	-	20’	23’	-
		TR	-	40’	45’	-	155’	160’	-
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	-	88’	90’	-	110’	128’	-
		R	140’	283’	285’	-	185’	205’	-
	WB	L	90’	10’	10’	-	68’	65’	-
		T	-	5’	5’	-	25’	23’	-
		R	35’	8’	8’	-	53’	50’	-
	NB	L	290’	83’	113’	-	165’	223’	-
		TR	-	55’	60’	-	108’	123’	-
	SB	L	290’	15’	15’	-	13’	13’	-
		TR	-	240’	253’	-	270’	290’	-
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	-	25’	25’		63’	63’	
		R	-	35’	35’		110’	110’	
	WB	LTR	-	3’	3’		15’	18’	
	NB	L	100’	23’	23’		13’	13’	
		TR	-	8’	8’		15’	15’	
	SB	L	60’	0’	0’		0’	0’	
		T	-	138’	138’		190’	198’	
		R	150’	15’	15’		10’	10’	
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	-	8’	8’	-	13’	15’	-
	SB	L	-	3’	3’	-	0’	0’	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	-	8’	8’	-	28’	28’	-
	NB	LR	-	43’	50’	-	68’	80’	-
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	248’	-	-	55’
	WB	LTR	-	35’	50’	328’	15’	18’	168’
	NB	LTR	-	363’	593’	158’	298’	490’	268’
	SB	LTR	-	5’	8’	0’	3’	5’	3’
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	-	50’	50’		103’	135’	
		R	290’	3’	3’		10’	10’	
	WB	LTR	-	3’	3’		3’	3’	
	NB	L	100’	3’	3’		3’	3’	
	SB	L	120’	0’	0’		0’	0’	
Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard	EB	L	-	8’	10’		8’	10’	
		R	-	3’	3’		0’	0’	
	NB	L	-	3’	3’		0’	0’	
	SB	L	-	8’	8’		3’	3’	

Table XIII (continued)
2026 - Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				No Build	Build	Build w/ Mit.	No Build	Build	Build w/ Mit.
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	-	15’	18’		15’	18’	
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	-	0’	0’		3’	3’	
	NB	LR	-	45’	55’		20’	20’	
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	-	5’	5’		3’	3’	
	NB	LR	-	18’	18’		20’	20’	
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	23’		-	50’	
	NB	L	-	-	8’		-	5’	
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	20’		-	55’	
	NB	L	75’	-	8’		-	3’	

Table XIV
2036 Design Horizon Year - Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				DHY No Build	DHY Build	DHY Build w/ Mit.	DHY No Build	DHY Build	DHY Build w/ Mit.
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	475’	311’	373’	392’	325’	346’	373’
		T	-	713’	713’	276’	736’	736’	247’
		R	310’	0’	0’	-	13’	13’	-
	WB	L	180’	177’	177’	135’	71’	71’	79’
		T	-	768’	768’	847’	878’	878’	1072’
		R	560’	7’	31’	30’	10’	27’	26’
	NB	L	150’	131’	136’	180’	167’	167’	246’
		TR	-	289’	308’	416’	323’	332’	504’
	SB	L	175’	132’	161’	132’	165’	292’	169’
		TR	-	407’	446’	576’	478’	554’	729’
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	330’	915’	976’	395’	1086’	1226’	574’
		T	-	349’	350’	377’	446’	456’	558’
		R	145’	0’	0’	-	16’	16’	-
	WB	L	175’	112’	112’	112’	169’	169’	173’
		T	-	256’	263’	264’	376’	378’	376’
		R	170’	802’	789’	719’	691’	691’	605’
	NB	L	140’	81’	82’	81’	139’	140’	154’
		TR	140’	538’	545’	566’	528’	532’	607’
	SB	L	100’	898’	908’	881’	861’	867’	924’
		T	-	606’	612’	596’	1101’	1107’	1183’
		R	-	74’	110’	103’	326’	372’	443’
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	120’	233’	225’	225’	205’	200’	200’
		R	-	415’	488’	488’	273’	295’	285’
	NB	T	-	513’	625’	548’	143’	170’	128’
		R	80’	0’	0’	0’	0’	0’	0’
	SB	L	150’	153’	153’	148’	143’	143’	173’
		T	-	268’	273’	260’	293’	303’	208’
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	520’	244’	248’	248’	292’	296’	356’
		LT	-	246’	248’	248’	293’	298’	358’
		R	350’	188’	217’	217’	269’	290’	324’
	NB	L	105’	344’	331’	334’	298’	291’	350’
		T	-	264’	248’	270’	22’	21’	22’
	SB	T	-	156’	148’	187’	487’	486’	460’
		R	140’	0’	0’	9’	280’	305’	281’

Table XIV (continued)
2036 Design Horizon Year - Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				DHY No Build	DHY Build	Build w/ Mit.	No Build	Build	DHY No Build
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	-	103'	103'	-	95'	95'	-
	WB	LTR		35'	35'	-	118'	118'	-
	NB	L	130'	8'	8'	-	10'	10'	-
		TR	-	340'	350'	-	378'	405'	-
	SB	L	155'	8'	8'	-	23'	28'	-
		TR	-	140'	148'	-	173'	180'	-
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	-	90'	95'	-	113'	133'	-
		R	140'	298'	300'	-	193'	215'	-
	WB	L	90'	8'	10'	-	68'	65'	-
		T	-	5'	5'	-	25'	23'	-
		R	35'	8'	8'	-	53'	53'	-
	NB	L	290'	93'	132'	-	233'	293'	-
		TR	-	70'	75'	-	120'	215'	-
	SB	L	290'	15'	15'	-	13'	13'	-
		TR	-	260'	273'	-	295'	315'	-
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	-	25'	25'		65'	65'	
		R	-	35'	35'		113'	113'	
	WB	LTR	-	3'	3'		15'	18'	
	NB	L	100'	23'	23'		13'	13'	
		TR	-	8'	8'		15'	15'	
	SB	L	60'	0'	0'		0'	0'	
		T	-	148'	148'		203'	210'	
		R	150'	15'	15'		10'	10'	
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	-	8'	10'	-	15'	18'	-
	SB	L	-	3'	3'	-	0'	0'	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	-	10'	10'	-	30'	33'	-
	NB	LR	-	48'	33'	-	83'	98'	-
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	278'	-	-	60'
	WB	LTR	-	38'	55'	390'	18'	18'	195'
	NB	LTR	-	438'	683'	173'	370'	585'	308'
	SB	LTR	-	5'	8'	0'	3'	5'	3'
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	-	55'	55'		245'	275'	
		R	290'	5'	5'		13'	13'	
	WB	LTR	-	3'	3'		3'	6'	
	NB	L	100'	3'	3'		3'	3'	
	SB	L	120'	0'	0'		0'	0'	

Table XIV (continued)
2036 Design Horizon Year - Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				DHY No Build	DHY Build	Build w/ Mit.	No Build	Build	DHY No Build
Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard	EB	L	-	10’	13’		10’	10’	
		R	-	3’	5’		0’	0’	
	NB	L	-	3’	3’		0’	0’	
	SB	L	-	8’	8’		3’	3’	
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	-	18’	20’		15’	18’	
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	-	0’	0’		3’	3’	
	NB	LR	-	53’	63’		18’	23’	
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	-	5’	5’		3’	3’	
	NB	LR	-	18’	20’		20’	23’	
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	25’		-	55’	
	NB	L	-	-	8’		-	5’	
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	20’		-	70’	
	NB	L	75’	-	8’		-	3’	

Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road

With the addition of site generated traffic, the intersection is anticipated to operate at No Build overall levels of service “F” during the analyzed peak hours. Additionally, several movements are anticipated to continue to operate at levels of service “F”, including the eastbound left turn movement and westbound through movements during both analyzed peak hours, the eastbound through movement during the weekday morning peak hour and the northbound and southbound through/right movements during the weekday evening peak hour.

As part of The Project, it is proposed to widen the eastbound approach to extend the eastbound left turn lane to provide 475 FT of storage length and to reconfigure the approach to provide a dedicated left turn lane, a dedicated through lane and a shared through/right turn lane. Further, it is proposed to widen the southbound approach to provide dual southbound left turn lanes with a storage length of 175 FT. The radius on the northeast corner of the intersection will also be widened to help facilitate westbound right turn movements for tractor trailers. It is proposed to increase the cycle length to 150 seconds during the weekday morning peak hour and 140 seconds during the weekday evening peak hour.

With the addition of site generated traffic, proposed intersection improvements and signal retiming, the intersection is anticipated to operate at overall level of service "E" during the studied peak hours, which is consistent with or an improvement from No Build conditions. It should be noted that the increase in delay for the southbound left turn movement is a result of the increased cycle length and the removal of protected-permitted phasing required by the installation of a dual left turn lane. The movement is anticipated to operate with a volume-to-capacity ratio generally consistent with No Build conditions during both peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, proposed intersection improvements and signal retiming, there is anticipated to be a maximum increase of approximately 10 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

It is anticipated that the widening of the eastbound and southbound approaches of the intersection, as well as the modification of the northeast corner of the intersection, will be accomplished with minor pavement widening and without the need for right-of-way acquisition. Relocation of the existing traffic signal equipment, crosswalks, and utility poles may be required depending on the final design. The intersection improvements would be phased in such a way to minimize impacts to the existing intersection traffic. Detailed Work Zone Traffic Control Plans will ultimately be prepared for use by the contractor during construction. These improvements, along with the signal timing modifications, would need to be coordinated with the NYSDOT and appropriate utility companies. Funding of the necessary improvements would be provided by the Applicant.

It should be noted that it is not anticipated that the ability of ambulances to utilize Lafayette Avenue to travel to Good Samaritan Hospital just west of this intersection to be degraded. There are paved shoulders and a striped or two-way left turn lane median through Lafayette Avenue corridor between Hemion Road and Airmont Road. These provide space for vehicles to pull off and emergency vehicles to pass in the event of an emergency.

Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)

With the addition of site generated traffic, the intersection is anticipated to operate at No Build overall level of service "F" during the weekday morning and weekday evening peak hours. Additionally, several movements are anticipated to continue to operate at levels of service "F", including the eastbound left turn movement, southbound left turn movement and southbound through movement during both analyzed peak hours, the westbound right turn movement during the weekday morning peak hour and the northbound left turn movement during the weekday evening peak hour.

As part of The Project, it is proposed to widen and reconfigure the eastbound approach of the intersection to provide dual dedicated left turn lanes and to modify the radius on the northwest corner of the intersection to help facilitate southbound right turn movements for tractor trailers. It is also proposed to reallocate two seconds from the eastbound left ROW phase to the westbound ROW phase and three seconds from the northbound ROW phase to the southbound left ROW phase during the weekday morning and weekday evening peak hours .

With the addition of site generated traffic, proposed intersection improvements and signal retiming, the intersection is anticipated to operate at level of service "E" during both peak hours, which is an improvement from No Build conditions. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, proposed intersection improvements and signal retiming, there is anticipated to be a maximum increase of approximately 5 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. Further, the reconfiguration of the eastbound approach to provide dual left turn lanes is anticipated to result in a substantial reduction in queues for the eastbound left turn movement due to the additional storage length provided. See Tables XVI and XVII for the individual movement 95th percentile queues.

The reconfiguration of the eastbound approach and modification of the northwest corner of the intersection would require pavement widening, but it is anticipated to be completed without the acquisition of additional right-of-way. Relocation of the existing traffic signal equipment, crosswalks, and utility poles may be required depending on the final design. The intersection improvements would be phased in such a way to minimize impacts to the existing intersection traffic. Detailed Work Zone Traffic Control Plans will ultimately be prepared for use by the contractor during construction. These improvements, along with the signal timing modifications, would need to be coordinated with the NYSDOT and appropriate utility companies. Funding of the necessary improvements would be provided by the Applicant.

Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps

With the addition of site generated traffic, intersection is anticipated to operate at overall levels of "E" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "E" or better, with the exception of the northbound through movement, which is anticipated to continue to operate at level of service "F" during the weekday morning peak hour. It should be noted that with minor signal timing adjustments, the northbound through movement would operate with delays more consistent with No Build conditions. Specifically, it is proposed to reallocate 3 seconds from the southbound lead left turn phase to the northbound-southbound ROW phase during the weekday morning peak hour and to reallocate 6 seconds from the southbound lead left turn phase during the weekday evening peak hour, with 4 seconds dedicated to the northbound-southbound ROW phase and 2 seconds to the eastbound ROW phase. With these timing adjustments, it is proposed to maintain the same timing splits during both the weekday morning and weekday evening peak hours. See Tables IX through XII for the individual movement levels of service and delays.

Signal timing modifications would need to be coordinated with the operator of the signals. No roadway improvements or additional right-of-way would be necessary.

With the addition of site generated traffic, there is anticipated to be a maximum increase of approximately 3 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps

With the addition of site generated traffic, the intersection is anticipated to operate at No Build overall levels of service "E" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at No Build levels of service "D" or better during the analyzed peak hours, with the exception of the northbound left turn movement, which operates at level of service "F" during the weekday morning and evening peak hour. It should be noted that with minor signal timing adjustments, the northbound left turn movement would operate with delays more consistent with No Build conditions. Specifically, it is proposed to reallocate 2 seconds from the southbound ROW phase to the northbound lead left turn phase during the weekday morning peak hour and to reallocate 3 seconds from the westbound ROW phase during the weekday evening peak hour, with 1 second dedicated to the northbound lead left turn phase and 2 seconds to the southbound ROW phase. See Tables IX through XII for the individual movement levels of service and delays.

Signal timing modifications would need to be coordinated with the operator of the signals. No roadway improvements or additional right-of-way would be necessary.

With the addition of site generated traffic and proposed signal retiming, there is anticipated to be a maximum increase of approximately 3 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & North DeBaun Avenue

With the addition of site generated traffic, the intersection is anticipated to operate at No Build overall levels of service "B" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "C" or better during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a maximum increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard

With the addition of site generated traffic, the intersection is anticipated to operate at overall level of services "C" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "E" or better during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a maximum increase of approximately 2 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway

With the addition of site generated traffic, the intersection is anticipated to operate at No Build overall level of service "A" during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service No Build "C" or better during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a minimal increase in the 95th percentile queues for all movements at the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Dunnigan Drive

With the addition of site generated traffic, all movements are anticipated to operate at level of service "C" or better with little to no change in delay during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a minimal increase in the 95th percentile queues for all movements at the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Lafayette Avenue (NYS Route 59) & Brookside Avenue

With the addition of site generated traffic, all movements are anticipated to operate at levels of service "E" or better with minor changes in delay during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a maximum increase of approximately 1 vehicle in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive

With the addition of site generated traffic, the northbound movement is anticipated to continue to operate at level of service "F" during the analyzed peak hours.

As part of the project, it is proposed to convert the intersection to multi-way stop control, which would result in all movements operating at level of service "E" or better during the analyzed peak hours, with the exception of the westbound movement during the weekday morning peak hour, which is anticipated to operate at level of service "F". It should be noted that due to the peak period of the adjacent schools, it is anticipated that the poor level of service will only exist for short intervals. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic and the conversion to multi-way stop control, it is anticipated that the northbound 95th percentile queue would lessen when compared to both No Build and Build conditions. This would prevent the northbound approach queuing from blocking the Suffern Middle School Driveway along Hemion Road. See Tables XVI and XVII for the individual movement 95th percentile queues.

A multi-way stop control evaluation was prepared for the intersection based on criteria set forth within the *Manual on Uniform Traffic Control Devices* (MUTCD) and is included in Appendix E. Based on the evaluation of the intersection, multi-way stop control is warranted. Additional improvements to ensure consistent operations of the Suffern Middle School driveways may also be necessary. Funding of the necessary improvements would be provided by the Applicant.

Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway

With the addition of site generated traffic, all movements are anticipated to operate at levels of service consistent with No Build conditions with little to no change in delay during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard

With the addition of site generated traffic, all movements are anticipated to operate at No Build level of service "D" or better with little to no change in delay during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Suffern Middle School Egress Driveway

With the addition of site generated traffic, all movements are anticipated to operate at No Build level of service "C" or better with little to no change in delay during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Montebello Road (CR 93) & Suffern Middle School Driveway

With the addition of site generated traffic, all movements are anticipated to operate at No Build levels of service "C" or better with little to no change in delay during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Montebello Road (CR 93) & Montebello Elementary School Driveway

With the addition of site generated traffic, all movements are anticipated to operate at levels of service "C" or better with little to no change in delay during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Tables XVI and XVII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Old Mill Road

Old Mill Road intersects Hemion Road to form an unsignalized T-intersection with the eastbound approach of Old Mill Road operating under stop control. It is proposed to widen Hemion Road to provide a dedicated left turn lane with 75' of storage length and a dedicated through lane on the northbound approach. The southbound approach of Hemion Road is proposed to provide a shared through/right turn lane. No changes are proposed to the eastbound approach of Old Mill Road, which currently provides a shared left turn/right turn lane.

As designed, all movements are anticipated to operate at levels of service "E" or better during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.

As designed, Old Mill Road is anticipated to operate with a 95th percentile queue length of 55 feet. Old Mill Road provides significant throat length prior to the first on-site intersection. Therefore, it is not anticipated that this queue will impact on-site circulation. See Tables XVI and XVII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Site Driveway

The site driveway is proposed to intersect Hemion Road to form an unsignalized T-intersection with the eastbound approach of the site driveway operating under stop control. The northbound approach of Hemion Road provides a shared left turn/through lane, while the southbound approach provides a shared through/right turn lane. The eastbound approach of the site driveway provides a shared left turn/right turn lane.

As designed, the site driveway is anticipated to operate at levels of service "E" or better during the analyzed peak hours. See Tables IX through XII for the individual movement levels of service and delays.
As designed, the site driveway is anticipated to operate with a 95th percentile queue length of 70 feet. The driveway provides significant throat length prior to the first on-site intersection. Therefore, it is not anticipated that this queue will impact on-site circulation. See Tables XVI and XVII for the individual movement 95th percentile queues.

Alternative Land Use Code Future Conditions

As requested, additional trip generation projections were prepared using LUC 130 – Industrial Park, as published by ITE. Note, based on data published by the ITE in the 5th Edition of the *Parking Generation Manual,* LUC 130 has an average peak parking demand of 1.20 vehicles per 1,000 SF which translates to a projected parking demand of 1,466 vehicles. The site as currently proposed provides a total of 661 parking stalls, less than 50% of the ITE's average peak parking demand for LUC 130. Therefore, it is not anticipated the current development proposal could support an industrial park development. However, in an effort to present a conservative assessment, the alternative land use analysis is presented below. Table XV summarizes the trip generation for each of the three proposed buildings as well as the total trip generation for The Project under LUC 130.

Table XV
Proposed Trip Generation – LUC 130 (Industrial Park)

Trip Type		AM PSH			PM PSH		
		In	Out	Total	In	Out	Total
Building 1 – 963,100 SF Industrial Park	**Total**	**265**	**62**	**327**	**72**	**255**	**327**
	Trucks	18	21	39	15	24	39
	Cars	247	41	288	57	231	288
Building 2 – 170,500 SF Industrial Park	**Total**	**47**	**11**	**58**	**13**	**45**	**58**
	Trucks	3	4	7	3	4	7
	Cars	44	7	51	10	41	51
Building 3 – 88,200 SF Industrial Park	**Total**	**24**	**6**	**30**	**7**	**23**	**30**
	Trucks	2	2	4	2	2	4
	Cars	22	4	26	5	21	26
Total	**Total**	**336**	**79**	**415**	**92**	**323**	**415**
	Trucks	23	27	50	20	30	50
	Cars	313	52	365	72	293	365

The trips were distributed to the adjacent roadway network as shown in Figures 6 and 8. Figures 13-15 illustrate LUC 130 Car Site Generated Volumes, LUC 130 Truck Site Generated Volumes, and the LUC 130 Total Site Generated Volumes, respectively. The LUC 130 Total Site Generated Volumes assigned to the study area network were added to the No Build traffic volumes to generate the LUC 130 Build traffic volumes, which are shown in Figure 16.

Alternate Land Use Code Future Capacity Analysis

Operational conditions at the study intersections were analyzed under the No Build and LUC 130 Build conditions and are summarized in Table XVI and Table XVII.

Table XVI
Alternate Land Use Code Future AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (129)	1.13	F (264)	1.48	F (151)	1.14
		T	F (95)	1.07	F (103)	1.10	C (33)	0.51
		R	A (1)	0.08	A (1)	0.08	C (33)	0.51
	WB	L	D (47)	0.77	D (49)	1.17	C (29)	0.50
		T	F (119)	1.15	F (128)	1.17	F (147)	1.20
		R	A (2)	0.14	A (4)	0.33	A (5)	0.33
	NB	L	D (41)	0.71	D (41)	0.72	E (68)	0.84
		TR	D (44)	0.70	D (46)	0.75	E (69)	0.84
	SB	L	C (33)	0.60	E (60)	0.87	E (76)	0.72
		TR	E (59)	0.90	E (60)	0.91	E (74)	0.93
	Overall		**E (78)**	**1.15**	**F (93)**	**1.48**	**E (79)**	**1.20**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (151)	1.20	F (207)	1.34	F (126)	1.09
		T	D (45)	0.62	D (44)	0.61	E (62)	0.78
		R	A (1)	0.03	A (1)	0.03	E (62)	0.78
	WB	L	D (38)	0.34	D (38)	0.33	D (41)	0.42
		T	E (68)	0.81	E (70)	0.83	E (75)	0.82
		R	F (94)	1.08	F (87)	1.06	C (34)	0.83
	NB	L	D (40)	0.15	D (42)	0.16	C (35)	0.13
		TR	E (59)	0.80	E (60)	0.81	E (66)	0.86
	SB	L	F (160)	1.21	F (165)	1.22	E (80)	0.95
		T	F (96)	1.01	F (96)	1.00	F (85)	0.96
		R	A (6)	0.58	A (10)	0.69	B (10)	0.71
	Overall		**E (83)**	**1.21**	**F (90)**	**1.34**	**E (65)**	**1.09**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (21)	0.66	B (19)	0.61	B (19)	0.61
		R	D (45)	0.94	F (63)	1.01	F (63)	1.01
	NB	T	F (54)	1.03	F (111)	1.17	F (96)	1.14
	SB	L	D (36)	0.79	D (36)	0.79	D (38)	0.83
		T	C (24)	0.54	C (26)	0.58	C (26)	0.58
	Overall		**D (37)**	**1.03**	**E (56)**	**1.17**	**D (52)**	**1.14**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	D (44)	0.88	D (42)	0.87	D (42)	0.87
		LT	D (44)	0.88	D (42)	0.87	D (42)	0.87
		R	C (30)	0.81	D (45)	0.93	D (45)	0.93
	NB	L	F (399)	1.82	F (434)	1.90	F (288)	1.57
		T	B (17)	0.76	B (17)	0.78	B (18)	0.78
	SB	T	C (25)	0.81	C (34)	0.84	E (62)	0.95
		R	A (6)	0.55	A (8)	0.57	B (10)	0.62
	Overall		**E (64)**	**1.82**	**E (71)**	**1.90**	**E (63)**	**1.57**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XVI (continued)
Alternate Land Use Code Future AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (34)	0.40	C (34)	0.40	-	-
	WB	LTR	C (30)	0.14	C (30)	0.14	-	-
	NB	L	A (4)	0.10	A (4)	0.10	-	-
		TR	B (12)	0.72	B (13)	0.74	-	-
	SB	L	A (7)	0.08	A (7)	0.08	-	-
		TR	A (3)	0.65	A (3)	0.69	-	-
	Overall		**A (9)**	**0.72**	**A (9)**	**0.74**	**-**	**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (21)	0.31	C (21)	0.33	-	-
		R	C (27)	0.78	C (27)	0.79	-	-
	WB	L	B (19)	0.03	C (24)	0.05	-	-
		T	B (19)	0.04	B (18)	0.04	-	-
		R	B (19)	0.03	B (18)	0.03	-	-
	NB	L	B (13)	0.56	C (26)	0.78	-	-
		TR	A (5)	0.60	A (5)	0.61	-	-
	SB	L	B (11)	0.08	B (12)	0.09	-	-
		TR	B (19)	0.54	C (20)	0.58	-	-
	Overall		**B (15)**	**0.78**	**B (17)**	**0.79**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (35)	0.17	C (35)	0.17	-	-
		T	C (31)	0.25	C (31)	0.25	-	-
	WB	LTR	C (34)	0.02	C (24)	0.02	-	-
	NB	L	A (4)	0.46	A (4)	0.46	-	-
		TR	A (1)	0.40	A (1)	0.43	-	-
	SB	L	A (4)	0.00	A (4)	0.00	-	-
		T	A (6)	0.41	A (6)	0.42	-	-
		R	A (4)	0.07	A (4)	0.07	-	-
	Overall		**A (4)**	**0.46**	**A (4)**	**0.46**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (16)	0.085	c (21)	0.115	-	-
	SB	L	a (9)	0.018	a (10)	0.020	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	a (10)	0.100	b (10)	0.103	-	-
	NB	LR	c (18)	0.347	c (22)	0.462	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XVI (continued)
Alternate Land Use Code Future AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	-	A (10)	0.63
	WB	L	b (10)	0.323	b (12)	0.486	E (74)	0.99
		TR					D (51)	0.91
	NB	LTR	f (123)	1.121	f (511)	2.010	B (11)	0.69
	SB	LTR	e (43)	0.055	f (92)	0.118	A (8)	0.01
	Overall		**-**	**-**	**-**	**-**	**C (30)**	**0.99**
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (87)	0.487	f (87)	0.487	-	-
		R	b (14)	0.046	b (14)	0.046	-	-
	WB	LTR	c (16)	0.036	b (17)	0.039	-	-
	NB	L	b (11)	0.036	b (11)	0.036	-	-
	SB	L	b (11)	0.009	b (12)	0.010	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	d (28)	0.089	e (41)	0.131	-	-
		R	b (13)	0.038	c (17)	0.050	-	-
	NB	L	a (9)	0.018	a (10)	0.022	-	-
	SB	L	a (9)	0.078	a (9)	0.081	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	c (18)	0.175	c (22)	0.225	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (9)	0.015	a (9)	0.015	-	-
	NB	LR	c (22)	0.388	d (29)	0.483	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (8)	0.071	a (9)	0.072	-	-
	NB	LR	b (14)	0.180	c (15)	0.203	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	f (53)	0.469	-	-
	NB	L	-	-	b (12)	0.192	-	-
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	f (54)	0.393	-	-
	NB	LT	-	-	-	-	-	-
	SB	TR	-	-	b (11)	0.188	-	-
	Overall		**-**	**-**	**-**	**-**	**-**	**-**

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XVII
Alternate Land Use Code Future PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (83)	0.99	F (104)	1.07	E (76)	0.92
		T	D (39)	0.84	D (39)	0.85	C (26)	0.48
		R	A (1)	0.12	A (1)	0.12	C (26)	0.48
	WB	L	B (18)	0.40	B (18)	0.40	B (20)	0.29
		T	F (86)	1.07	F (87)	1.07	F (91)	1.06
		R	A (1)	0.12	A (3)	0.18	A (2)	0.18
	NB	L	D (39)	0.69	D (39)	0.69	D (55)	0.77
		TR	E (76)	0.95	F (81)	0.97	E (66)	0.82
	SB	L	D (43)	0.74	F (169)	1.25	D (37)	0.60
		TR	F (149)	1.20	F (244)	1.44	F (159)	1.22
	Overall		**E (69)**	**1.20**	**F (98)**	**1.44**	**E (69)**	**1.22**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (218)	1.36	F (341)	1.66	F (104)	0.98
		T	D (48)	0.69	D (49)	0.71	E (78)	0.91
		R	A (2)	0.13	A (2)	0.13	E (78)	0.91
	WB	L	D (40)	0.54	D (41)	0.56	E (75)	0.81
		T	E (73)	0.87	E (73)	0.88	F (114)	1.00
		R	E (65)	0.99	E (64)	0.99	D (38)	0.85
	NB	L	F (100)	0.78	F (103)	0.80	D (55)	0.31
		TR	E (67)	0.79	E (64)	0.79	F (83)	0.89
	SB	L	F (122)	1.09	F (124)	1.09	E (78)	0.88
		T	E (69)	0.89	E (70)	0.89	F (101)	0.96
		R	B (11)	0.65	B (13)	0.69	B (17)	0.74
	Overall		**E (78)**	**1.36**	**F (97)**	**1.66**	**E (74)**	**1.00**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (25)	0.66	C (24)	0.61	C (23)	0.61
		R	D (35)	0.88	D (37)	0.89	C (35)	0.89
	NB	T	B (11)	0.69	B (14)	0.75	B (10)	0.70
	SB	L	C (33)	0.80	C (33)	0.80	D (43)	0.97
		T	B (15)	0.59	B (17)	0.61	B (11)	0.61
	Overall		**B (20)**	**0.88**	**C (21)**	**0.89**	**B (19)**	**0.97**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	C (35)	0.80	C (34)	0.80	D (39)	0.84
		LT	C (35)	0.80	C (35)	0.80	D (40)	0.84
		R	C (27)	0.80	C (27)	0.81	C (27)	0.82
	NB	L	F (81)	1.08	F (105)	1.15	F (86)	1.10
		T	A (5)	0.44	A (4)	0.44	A (5)	0.43
	SB	T	F (96)	1.01	F (94)	1.03	F (94)	1.03
		R	C (23)	0.68	C (25)	0.74	C (23)	0.73
	Overall		**D (47)**	**1.08**	**D (49)**	**1.15**	**D (48)**	**1.10**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XVII (continued)
Alternate Land Use Code Future PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (33)	0.37	C (33)	0.37	-	-
	WB	LTR	C (34)	0.46	C (34)	0.46	-	-
	NB	L	A (6)	0.13	A (6)	0.13	-	-
		TR	B (16)	0.75	B (18)	0.79	-	-
	SB	L	A (9)	0.19	B (10)	0.20	-	-
		TR	A (7)	0.70	A (7)	0.72	-	-
	Overall		**B (12)**	**0.75**	**B (14)**	**0.72**		**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (29)	0.44	C (27)	0.51	-	-
		R	C (25)	0.65	C (25)	0.71	-	-
	WB	L	C (25)	0.21	C (23)	0.18	-	-
		T	C (24)	0.09	C (22)	0.07	-	-
		R	C (25)	0.21	C (23)	0.18	-	-
	NB	L	C (26)	0.83	D (49)	0.94	-	-
		TR	A (7)	0.48	B (14)	0.51	-	-
	SB	L	A (8)	0.08	A (10)	0.10	-	-
		TR	B (15)	0.58	B (18)	0.63	-	-
	Overall		**B (16)**	**0.83**	**C (22)**	**0.94**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (32)	0.31	C (31)	0.29	-	-
		R	C (30)	0.53	C (30)	0.53	-	-
	WB	LTR	C (30)	0.08	C (31)	0.11	-	-
	NB	L	A (6)	0.22	A (6)	0.24	-	-
		TR	A (1)	0.44	A (1)	0.44	-	-
	SB	L	A (5)	0.01	A (5)	0.01	-	-
		T	A (8)	0.52	A (8)	0.55	-	-
		R	A (5)	0.04	A (5)	0.04	-	-
	Overall		**A (7)**	**0.53**	**A (7)**	**0.55**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (16)	0.148	c (19)	0.188	-	-
	SB	L	a (9)	0.006	a (9)	0.007	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	b (12)	0.269	b (13)	0.298	-	-
	NB	LR	d (29)	0.510	e (39)	0.609	-	-

a (#) – Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) – Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XVII (continued)
Alternate Land Use Code Future PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		PM PSH					
			No Build		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	-	A (6)	0.41
	WB	L	a (8)	0.172	a (9)	0.195	B (19)	0.62
		TR	-	-	-	-	B (13)	0.48
	NB	LTR	f (60)	0.956	f (168)	1.284	B (14)	0.69
	SB	LTR	c (20)	0.043	c (24)	0.056	A (6)	0.01
	Overall		**-**	**-**	**-**	**-**	**B (13)**	**0.69**
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (127)	0.794	f (529)	1.661	-	-
		R	c (16)	0.129	c (16)	0.129	-	-
	WB	LTR	b (14)	0.043	c (15)	0.047	-	-
	NB	L	b (12)	0.033	b (12)	0.033	-	-
	SB	L	b (13)	0.007	b (14)	0.008	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	c (19)	0.096	c (24)	0.126	-	-
		R	b (11)	0.014	b (11)	0.015	-	-
	NB	L	a (8)	0.012	a (8)	0.012	-	-
	SB	L	a (9)	0.034	a (9)	0.038	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	b (14)	0.160	c (17)	0.199	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (8)	0.023	a (8)	0.026	-	-
	NB	LR	c (16)	0.180	c (20)	0.224	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (9)	0.018	a (9)	0.020	-	-
	NB	LR	b (13)	0.204	b (14)	0.235	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	f (73)	0.808	-	-
	NB	L	-	-	b (10)	0.058	-	-
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	f (86)	0.929	-	-
	NB	L	-	-	a (9)	0.034	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Alternate Land Use Code Future Queue Analysis

Queue length conditions at the study intersections were analyzed under the No Build and LUC 130 Build conditions. The 95th percentile queues for each study peak hour are summarized in Table XVIII below.

Table XVIII
Alternate Land Use Code Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				No Build	Build	Build w/ Mit.	No Build	Build	Build w/ Mit.
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	475’	292’	403’	477’	306’	334’	357’
		T	-	623’	623’	255’	635’	635’	265’
		R	310’	0’	0’	-	10’	10’	-
	WB	L	180’	161’	161’	126’	24’	68’	75’
		T	-	723’	723’	826’	828’	828’	921’
		R	560’	5’	33’	38’	8’	28’	27’
	NB	L	150’	113’	115’	192’	152’	152’	237’
		TR	-	274’	311’	427’	296’	306’	457’
	SB	L	175’	126’	202’	140’	175’	363’	143’
		TR	-	373’	420’	519’	447’	581’	753’
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	330’	851’	958’	485’	1008’	1249’	530’
		T	-	332’	335’	396’	442’	438’	737’
		R	145’	-	0’	-	14’	14’	-
	WB	L	175’	109’	108’	108’	161’	161’	227’
		T	-	243’	258’	285’	358’	362’	616’
		R	170’	728’	706’	315’	629’	629’	497’
	NB	L	140’	56’	58’	54’	128’	129’	79’
		TR	140’	473’	495’	541’	469’	480’	531’
	SB	L	100’	805’	822’	748’	764’	769’	678’
		T	-	585’	590’	597’	994’	1000’	993’
		R	-	62’	117’	149’	267’	1249’	335’
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	120’	225’	213’	213’	200’	193’	193’
		R	-	390’	518’	518’	260’	285’	275’
	NB	T	-	335’	538’	490’	115’	140’	113’
		R	80’	0’	0’	0’	0’	0’	0’
	SB	L	150’	160’	158’	148’	153’	148’	163’
		T	-	310’	315’	295’	295’	298’	200’
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	520’	230’	235’	235’	273’	278’	330’
		LT	-	231’	235’	235’	275’	282’	333’
		R	350’	175’	228’	228’	240’	252’	290’
	NB	L	105’	346’	322’	313’	311’	310’	341’
		T	-	255’	236’	256’	20’	19’	19’
	SB	T	-	159’	151’	207’	460’	460’	434’
		R	140’	0’	0’	21’	251’	294’	270’

Table XVIII (continued)
Alternate Land Use Code Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				No Build	Build	Build w/ Mit.	No Build	Build	Build w/ Mit.
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	-	98’	98’	-	90’	90’	-
	WB	LTR	-	33’	33’	-	115’	115’	-
	NB	L	130’	8’	8’	-	10’	10’	-
		TR	-	310’	325’	-	348’	488’	-
	SB	L	155’	5’	5’	-	20’	25’	-
		TR	-	40’	50’	-	155’	160’	-
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	-	88’	93’	-	110’	143’	-
		R	140’	283’	288’	-	185’	223’	-
	WB	L	90’	10’	10’	-	68’	63’	-
		T	-	5’	5’	-	25’	23’	-
		R	35’	8’	8’	-	53’	50’	-
	NB	L	290’	83’	148’	-	165’	248’	-
		TR	-	55’	60’	-	108’	208’	-
	SB	L	290’	15’	15’	-	13’	13’	-
		TR	-	240’	263’	-	270’	303’	-
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	-	25’	25’	-	63’	63’	-
		R	-	35’	35’	-	110’	110’	-
	WB	LTR	-	3’	3’	-	15’	18’	-
	NB	L	100’	23’	23’	-	13’	13’	-
		TR	-	8’	8’	-	15’	15’	-
	SB	L	60’	0’	0’	-	0’	0’	-
		T	-	138’	138’	-	190’	203’	-
		R	150’	15’	15’	-	10’	10’	-
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	-	8’	10’	-	13’	18’	-
	SB	L	-	3’	3’	-	0’	0’	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	-	8’	8’	-	28’	30’	-
	NB	LR	-	43’	60’	-	68’	90’	-
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	LTR	-	-	-	69'	-	-	44'
	WB	L	-	35’	68’	144'	15’	18’	81'
		TR				150’			76’
	NB	LTR	-	363’	753’	38'	298’	645’	228'
	SB	LTR	-	5’	10’	4'	3’	5’	7'
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	-	50’	50’	-	103’	180’	-
		R	290’	3’	3’	-	10’	10’	-
	WB	LTR	-	3’	3’	-	3’	3’	-
	NB	L	100’	3’	3’	-	3’	3’	-
	SB	L	120’	0’	0’	-	0’	0’	-
Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard	EB	L	-	8’	10’	-	8’	10’	-
		R	-	3’	3’	-	0’	0’	-
	NB	L	-	3’	3’	-	0’	0’	-
	SB	L	-	8’	8’	-	3’	3’	-

Table XVIII (continued)
Alternate Land Use Code Future Queue Analysis

Intersection	Direction/ Movement		Storage Length	AM PSH			PM PSH		
				No Build	Build	Build w/ Mit.	No Build	Build	Build w/ Mit.
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	-	15’	20’	-	13’	18’	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	-	0’	0’	-	3’	3’	-
	NB	LR	-	40’	63’	-	15’	20’	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	-	5’	5’	-	3’	3’	-
	NB	LR	-	15’	20’	-	18’	23’	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	-	-	53’	-	-	143’	-
	NB	L	-	-	18’	-	-	5’	-
Hemion Road (CR 93) & Site Driveway	EB	LR	-	-	40’	-	-	203’	-
	NB	L	150’	-	18’	-	-	3’	-

Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road

With the addition of site generated traffic, the intersection is anticipated to operate at overall level of service “F” during the analyzed peak hours. Additionally, several movements are anticipated to continue to operate at levels of service “F”, including the eastbound left turn movement and westbound through movements during both analyzed peak hours, the eastbound through movement during the weekday morning peak hour and the northbound and southbound through/right movements during the weekday evening peak hour.

Under this scenario, it is proposed to widen the eastbound approach to extend the eastbound left turn lane to provide 475 FT of storage length and to reconfigure the approach to provide a dedicated left turn lane, a dedicated through lane and a shared through/right turn lane. the southbound approaches to provide dual dedicated left turn lanes for each approach. Further, it is proposed to widen the southbound approach to provide dual southbound left turn lanes with a storage length of 150 FT. With these proposed improvements, the intersection is anticipated to operate at overall No Build level of service “E” and all movements will operate with levels of service and delays more consistent with No Build conditions. See Tables XVI and XVII for the individual movement levels of service and delays.

With the addition of site generated traffic, proposed intersection improvements and signal retiming, there is anticipated to be a maximum increase of approximately 12 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Table XVIII for the individual movement 95th percentile queues.

It is anticipated that the widening of the eastbound and southbound approaches of the intersection, as well as the modification of the northeast corner of the intersection, will be accomplished with minor pavement widening and without the need for right-of-way acquisition. Relocation of the existing traffic signal equipment, crosswalks, and utility poles may be required depending on the final design. The intersection improvements would be phased in such a way to minimize impacts to the existing intersection traffic. Detailed Work Zone Traffic Control Plans will ultimately be prepared for use by the contractor during construction. These improvements, along with the signal timing modifications, would need to be coordinated with the NYSDOT and appropriate utility companies.

Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)

With the addition of site generated traffic, the intersection is anticipated to operate at overall level of service "F" during the analyzed peak hours. Additionally, several movements are anticipated to continue to operate at levels of service "F", including the eastbound left turn movement and the southbound left turn movement during both analyzed peak hours, the southbound through movement and the westbound right turn movement during the weekday morning peak hour and the northbound left turn movement during the weekday evening peak hour.

Under this scenario, it is proposed to widen and reconfigure the eastbound approach of the intersection to provide dual dedicated left turn lanes and to modify the radius on the northwest corner of the intersection to help facilitate southbound right turn movements for tractor trailers. See Tables XVI and XVII for the individual movement levels of service and delays.

With the addition of site generated traffic and proposed signal retiming, there is anticipated to be a maximum increase of approximately 12 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. Further, the reconfiguration of the eastbound approach to provide dual left turn lanes is anticipated to result in a substantial reduction in queues for the eastbound left turn movement due to the additional storage length provided. See Table XVIII for the individual movement 95th percentile queues.

The reconfiguration of the eastbound approach and modification of the northwest corner of the intersection would require pavement widening, but it is anticipated to be completed without the acquisition of additional right-of-way. Relocation of the existing traffic signal equipment, crosswalks, and utility poles may be required depending on the final design. The intersection improvements would be phased in such a way to minimize impacts to the existing intersection traffic. Detailed Work Zone Traffic Control Plans will ultimately be prepared for use by the contractor during construction. These improvements, along with the signal timing modifications, would need to be coordinated with the NYSDOT and appropriate utility companies.

Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps

With the addition of site generated traffic, intersection is anticipated to operate at overall levels of "E" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "D" or better, with the exception of the northbound through movement and eastbound right turn movement during the weekday morning peak hour, which are anticipated to operate at level of service "F". It should be noted that with minor signal timing adjustments, the intersection would operate with delays more consistent with No Build conditions. Specifically, it is proposed to reallocate 3 seconds from the southbound lead left turn phase to the northbound-southbound ROW phase during the weekday morning peak hour and to reallocate 6 seconds from the southbound lead left turn phase during the weekday evening peak hour, with 4 seconds dedicated to the northbound-southbound ROW phase and 2 seconds to the eastbound ROW phase. With these timing adjustments, it is proposed to maintain the same timing splits during both the weekday morning and weekday evening peak hours. See Tables XVI and XVII for the individual movement levels of service and delays.

Signal timing modifications would need to be coordinated with the operator of the signals. No roadway improvements or additional right-of-way would be necessary.

With the addition of site generated traffic and proposed signal retiming, there is anticipated to be a maximum increase of approximately 6 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Table XVIII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps

With the addition of site generated traffic, the intersection is anticipated to operate at overall No Build levels of service "E" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "D" or better during the analyzed peak hours, with the exception of the northbound left turn movement, which operates at level of service "F" during the weekday morning and evening peak hour, and the southbound through movement, which operates at level of service "F" during the weekday evening peak hour. It should be noted that with minor signal timing adjustments, the intersection would operate with delays more consistent with No Build conditions. Specifically, it is proposed to reallocate 3 seconds from the southbound ROW phase to the northbound lead left turn phase during the weekday morning peak hour and to reallocate 3 seconds from the westbound ROW phase during the weekday evening peak hour, with 1 second dedicated to the northbound lead left turn phase and 2 seconds to the southbound ROW phase. See Tables XVI and XVII for the individual movement levels of service and delays.

Signal timing modifications would need to be coordinated with the operator of the signals. No roadway improvements or additional right-of-way would be necessary.

With the addition of site generated traffic and proposed signal retiming, there is anticipated to be a maximum increase of approximately 3 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Table XVIII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & North DeBaun Avenue

With the addition of site generated traffic, the intersection is anticipated to operate at No Build overall levels of service "B" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "C" or better during the analyzed peak hours. See Tables XVI and XVII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a maximum increase of approximately 5 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Table XVIII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard

With the addition of site generated traffic, the intersection is anticipated to operate at overall levels of service "C" or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "D" or better during the analyzed peak hours. See Tables XVI and XVII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a maximum increase of approximately 4 vehicles in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Table XVIII for the individual movement 95th percentile queues.

Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway

With the addition of site generated traffic, the intersection is anticipated to operate at overall No Build level of service "A" during the analyzed peak hours. Additionally, each movement is anticipated to operate at levels of service "C" or better during the analyzed peak hours. See Tables XVI and XVII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a minimal increase in the 95th percentile queues for all movements at the intersection. See Table XVIII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Dunnigan Drive

With the addition of site generated traffic, all movements are anticipated to operate at level of service "C" or better with little to no change in delay during the analyzed peak hours. See Tables XVI and XVII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a minimal increase in the 95th percentile queues for all movements at the intersection. See Table XVIII for the individual movement 95th percentile queues.

Lafayette Avenue (NYS Route 59) & Brookside Avenue

With the addition of site generated traffic, all movements are anticipated to operate at levels of service "E" or better during the analyzed peak hours. See Tables XI and XIII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be a maximum increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. It is not anticipated that the increase in queues will have a detrimental impact on the operation of the intersection. See Table XVIII for the individual movement 95th percentile queues.

Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive

With the addition of site generated traffic, the northbound movement is anticipated to continue to operate at level of service "F" during the analyzed peak hours.

Under this condition, it is proposed to signalize the intersection and provide a dedicated westbound left turn lane, which would result in all movements operating at level of service "E" or better during the analyzed peak hours. See Tables XVI and XVII for the individual movement levels of service and delays.

With the addition of site generated traffic and the signalization of the intersection, there is anticipated to be a minimal increase in the 95th percentile queues for the northbound approach at the intersection. This would prevent the northbound approach queuing from blocking the Suffern Middle School Driveways along Hemion Road. See Table XVIII for the individual movement 95th percentile queues.

The signalization of the intersection would require a signal warrant evaluation submitted to Rockland County to determine if such control is warranted according to *Manual on Uniform Traffic Control Devices* (MUTCD) criteria. Pavement widening and potential right-of-way acquisition would be required to accommodate the proposed westbound left turn lane. Additional improvements to ensure consistent operations of the Suffern Middle School driveways may also be necessary. Construction should be scheduled during the summertime to occur during school breaks.

Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway

With the addition of site generated traffic, all movements are anticipated to operate at levels of service consistent with No-Build conditions with little to no change in delay during the analyzed peak hours. See Tables VII and VIII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase approximately 3 vehicles in the 95th percentile queues for all movements at the intersection. See Table XVIII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard

With the addition of site generated traffic, all movements are anticipated to operate at levels of service "E" or better during the analyzed peak hours. See Tables VII and VIII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Table XVIII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Suffern Middle School Egress Driveway

With the addition of site generated traffic, all movements are anticipated to operate at levels of service "C" or better with little to no change in delay during the analyzed peak hours. See Tables VII and VIII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Table XVIII for the individual movement 95th percentile queues.

Montebello Road (CR 93) & Suffern Middle School Driveway

With the addition of site generated traffic, all movements are anticipated to operate at levels of service "D" or better during the analyzed peak hours. See Tables VII and VIII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase approximately 1 vehicle in the 95th percentile queues for all movements at the intersection. See Table XVIII for the individual movement 95th percentile queues.

Montebello Road (CR 93) & Montebello Elementary School Driveway

With the addition of site generated traffic, all movements are anticipated to operate at levels of service "C" or better with little to no change in delay during the analyzed peak hours. See Tables VII and VIII for the individual movement levels of service and delays.

With the addition of site generated traffic, there is anticipated to be an increase of less than 1 vehicle in the 95th percentile queues for all movements at the intersection. See Table XVIII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Old Mill Road

Old Mill Road intersects Hemion Road to form an unsignalized T-intersection with the eastbound approach of Old Mill Road operating under stop control. It is proposed to widen Hemion Road to provide a dedicated left turn lane with 75' of storage length and a dedicated through lane on the northbound approach. The southbound approach of Hemion Road is proposed to provide a shared through/right turn lane. No changes are proposed to the eastbound approach of Old Mill Road, which currently provides a shared left turn/right turn lane.

As designed, Old Mill Road is anticipated to operate at level of service "F" during the analyzed peak hours. However, the level of delay for the eastbound approach is only anticipated to marginally exceed the threshold for level of service "F". Under this alternative scenario, signalization of the intersection of Hemion Road (CR 93) & Old Mill Road could result in improved levels of service for the intersection. See Tables VII and VIII for the individual movement levels of service and delays.

As designed, Old Mill Road is anticipated to operate with a 95th percentile queue length of 143 feet. The driveway provides significant throat length prior to the first on-site intersection. Therefore, it is not anticipated that this queue will impact on-site circulation. See Table XVIII for the individual movement 95th percentile queues.

Hemion Road (CR 93) & Site Driveway

Under this condition, the site driveway is proposed to intersect Hemion Road to form an unsignalized T-intersection with the eastbound approach of the site driveway operating under stop control. The northbound approach of Hemion Road provides a shared left turn/through lane, while the southbound approach provides a shared through/right turn lane. The eastbound approach of the site driveway provides a shared left turn/right turn lane.

As designed, the site driveway is anticipated to operate at level of service "F" during the analyzed peak hours. It should be noted that with the proposed signalization of Old Mill Road, a larger percentage of passenger car vehicles would be anticipated to enter and exit the site via the signalized intersection. Additionally, it as anticipated that the site driveway will operate at better than the theoretically calculated results, as the capacity analysis procedures are based on random traffic flow on the arterial roadway, whereas platooned traffic flow would be present in each direction of Hemion Road, due to the presence of the proposed traffic signals located along Hemion Road at Old Mill Road and at Montebello Road. Platooned traffic flow affords side road vehicles longer gaps in the main road traffic flow in which to perform their traffic movement. See Tables VII and VIII for the individual movement levels of service and delays.

As designed, the site driveway is anticipated to operate with a 95th percentile queue length of 203 feet. The driveway provides significant throat length prior to the first on-site intersection. Therefore, it is not anticipated that this queue will impact on-site circulation. See Table XVIII for the individual movement 95th percentile queues.

Project vs Alternate Land Use Code Capacity Analysis

Tables XIX and XX below compare the levels of service, delays, and vehicle-to-capacity ratios for the Build and Build w/ Mitigation conditions for The Project utilizing LUC 150 – Warehousing and the Alternate Future conditions utilizing LUC 130 – Industrial Park.

Table XIX
Future vs Alternate Land Use Code AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		Proposed Action (LUC 150)				Alternative Action (LUC 130)			
			Build		Build w/ Mit.		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (205)	1.33	F (102)	1.02	F (264)	1.48	F (151)	1.14
		T	F (101)	1.09	C (35)	0.53	F (103)	1.10	C (33)	0.51
		R	A (1)	0.08	-	-	A (1)	0.08	C (33)	0.51
	WB	L	D (48)	0.78	C (29)	0.51	D (49)	1.17	C (29)	0.50
		T	F (126)	1.10	F (118)	1.12	F (128)	1.17	F (147)	1.20
		R	A (5)	0.26	A (4)	0.24	A (4)	0.33	A (5)	0.33
	NB	L	D (41)	0.71	D (55)	0.75	D (41)	0.72	E (68)	0.84
		TR	D (45)	0.72	E (60)	0.76	D (46)	0.75	E (69)	0.84
	SB	L	D (41)	0.73	E (73)	0.66	E (60)	0.87	E (76)	0.72
		TR	E (54)	0.91	E (75)	0.94	E (60)	0.91	E (74)	0.93
	Overall		**F (86)**	**1.33**	**E (68)**	**1.12**	**F (93)**	**1.48**	**E (79)**	**1.20**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (180)	1.28	E (68)	0.79	F (207)	1.34	F (126)	1.09
		T	D (44)	0.62	D (48)	0.68	D (44)	0.61	E (62)	0.78
		R	A (1)	0.03	-	-	A (1)	0.03	E (62)	0.78
	WB	L	D (38)	0.34	D (39)	0.37	D (38)	0.33	D (41)	0.42
		T	E (69)	0.82	E (68)	0.82	E (70)	0.83	E (75)	0.82
		R	F (90)	1.07	E (70)	1.00	F (87)	1.06	C (34)	0.83
	NB	L	D (41)	0.15	D (38)	0.15	D (42)	0.16	C (35)	0.13
		TR	E (60)	0.80	E (64)	0.85	E (60)	0.81	E (66)	0.86
	SB	L	F (163)	1.22	F (128)	1.12	F (165)	1.22	E (80)	0.95
		T	F (96)	1.01	F (97)	1.01	F (96)	1.00	F (85)	0.96
		R	A (8)	0.64	A (8)	0.64	A (10)	0.69	B (10)	0.71
	Overall		**F (86)**	**1.28**	**E (67)**	**1.12**	**F (90)**	**1.34**	**F (65)**	**1.09**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	B (19)	0.62	B (19)	0.62	B (19)	0.61	B (19)	0.61
		R	D (50)	0.96	D (50)	0.96	F (63)	1.01	F (63)	1.01
	NB	T	F (94)	1.13	F (81)	1.10	F (111)	1.17	F (96)	1.14
	SB	L	D (36)	0.79	D (39)	0.83	D (36)	0.79	D (38)	0.83
		T	C (26)	0.57	C (26)	0.57	C (26)	0.58	C (26)	0.58
	Overall		**D (49)**	**1.13**	**D (46)**	**1.10**	**E (56)**	**1.17**	**D (52)**	**1.14**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	D (44)	0.88	D (44)	0.88	D (42)	0.87	D (42)	0.87
		LT	D (44)	0.88	D (44)	0.88	D (42)	0.87	D (42)	0.87
		R	D (38)	0.88	D (38)	0.88	D (45)	0.93	D (45)	0.93
	NB	L	F (414)	1.85	F (313)	1.62	F (434)	1.90	F (288)	1.57
		T	B (17)	0.77	B (18)	0.77	B (17)	0.78	B (18)	0.78
	SB	T	C (29)	0.82	D (40)	0.89	C (34)	0.84	E (62)	0.95
		R	A (7)	0.56	A (8)	0.59	A (8)	0.57	B (10)	0.62
	Overall		**E (67)**	**1.85**	**E (60)**	**1.62**	**E (71)**	**1.90**	**E (63)**	**1.57**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XIX (continued)
Future vs Alternate Land Use Code AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		Proposed Action (LUC 150)				Alternative Action (LUC 130)			
			Build		Build w/ Mit.		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (34)	0.40	-	-	C (34)	0.40	-	-
	WB	LTR	C (30)	0.14	-	-	C (30)	0.14	-	-
	NB	L	A (4)	0.10	-	-	A (4)	0.10	-	-
		TR	B (13)	0.73	-	-	B (13)	0.74	-	-
	SB	L	A (7)	0.08	-	-	A (7)	0.08	-	-
		TR	A (3)	0.67	-	-	A (3)	0.69	-	-
	Overall		**A (9)**	**0.73**	**-**	**-**	**A (9)**	**0.74**	**-**	**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (21)	0.33	-	-	C (21)	0.33	-	-
		R	C (27)	0.79	-	-	C (27)	0.79	-	-
	WB	L	C (24)	0.05	-	-	C (24)	0.05	-	-
		T	B (18)	0.04	-	-	B (18)	0.04	-	-
		R	B (18)	0.03	-	-	B (18)	0.03	-	-
	NB	L	B (18)	0.68	-	-	C (26)	0.78	-	-
		TR	A (5)	0.61	-	-	A (5)	0.61	-	-
	SB	L	B (12)	0.09	-	-	B (12)	0.09	-	-
		TR	B (20)	0.56	-	-	C (20)	0.58	-	-
	Overall		**B (16)**	**0.79**	**-**	**-**	**B (17)**	**0.79**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (35)	0.17	-	-	C (35)	0.17	-	-
		T	C (31)	0.25	-	-	C (31)	0.25	-	-
	WB	LTR	C (34)	0.02	-	-	C (24)	0.02	-	-
	NB	L	A (4)	0.46	-	-	A (4)	0.46	-	-
		TR	A (1)	0.42	-	-	A (1)	0.43	-	-
	SB	L	A (4)	0.00	-	-	A (4)	0.00	-	-
		T	A (6)	0.42	-	-	A (6)	0.42	-	-
		R	A (4)	0.07	-	-	A (4)	0.07	-	-
	Overall		**A (4)**	**0.46**	**-**	**-**	**A (4)**	**0.46**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (18)	0.101	-	-	c (21)	0.115	-	-
	SB	L	a (10)	0.019	-	-	a (10)	0.020	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	a (10)	0.102	-	-	b (10)	0.103	-	-
	NB	LR	c (20)	0.422	-	-	c (22)	0.462	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XIX (continued)
Future vs Alternate Land Use Code AM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		Proposed Action (LUC 150)				Alternative Action (LUC 130)			
			Build		Build w/ Mit.		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	L	-	-	e (38)	0.870	-	-	A (10)	0.63
	WB	L	b (11)	0.412	f (58)	0.971	b (12)	0.486	E (74)	0.99
		TR							D (51)	0.91
	NB	LTR	f (300)	1.547	d (27)	0.739	f (511)	2.010	B (11)	0.69
	SB	LTR	f (65)	0.084	b (12)	0.015	f (92)	0.118	A (8)	0.01
	Overall		**-**	**-**	**-**	**-**	**-**	**-**	**C (30)**	**0.99**
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (87)	0.487	-	-	f (87)	0.487	-	-
		R	b (14)	0.046	-	-	b (14)	0.046	-	-
	WB	LTR	c (16)	0.036	-	-	b (17)	0.039	-	-
	NB	L	b (11)	0.036	-	-	b (11)	0.036	-	-
	SB	L	b (11)	0.009	-	-	b (12)	0.010	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	d (35)	0.111	-	-	e (41)	0.131	-	-
		R	b (14)	0.044	-	-	c (17)	0.050	-	-
	NB	L	a (10)	0.020	-	-	a (10)	0.022	-	-
	SB	L	a (9)	0.081	-	-	a (9)	0.081	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	c (20)	0.204	-	-	c (22)	0.225	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (9)	0.015	-	-	a (9)	0.015	-	-
	NB	LR	d (26)	0.444	-	-	d (29)	0.483	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (9)	0.072	-	-	a (9)	0.072	-	-
	NB	LR	b (15)	0.194	-	-	c (15)	0.203	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	d (35)	0.243	-	-	f (53)	0.469	-	-
	NB	L	b (11)	0.099	-	-	b (12)	0.192	-	-
Hemion Road (CR 93) & Site Driveway	EB	LR	d (29)	0.210	-	-	f (54)	0.393	-	-
	NB	L	a (10)	0.097	-	-	b (11)	0.188	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XX
Future vs Alternate Land Use Code PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		Proposed Action (LUC 150)				Alternative Action (LUC 130)			
			Build		Build w/ Mit.		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (100)	1.05	E (74)	0.92	F (104)	1.07	E (76)	0.92
		T	D (39)	0.85	C (25)	0.48	D (39)	0.85	C (26)	0.48
		R	A (1)	0.12	-	-	A (1)	0.12	C (26)	0.48
	WB	L	B (18)	0.40	B (19)	0.29	B (18)	0.40	B (20)	0.29
		T	F (87)	1.07	F (84)	1.04	F (87)	1.07	F (91)	1.06
		R	A (2)	0.17	A (2)	0.17	A (3)	0.18	A (2)	0.18
	NB	L	D (39)	0.69	D (53)	.74	D (39)	0.69	D (55)	0.77
		TR	F (81)	0.97	E (76)	0.88	F (81)	0.97	E (66)	0.82
	SB	L	F (97)	1.04	E (67)	0.69	F (169)	1.25	D (37)	0.60
		TR	F (201)	1.34	F (149)	1.19	F (244)	1.44	F (159)	1.22
	Overall		**F (83)**	**1.34**	**E (69)**	**1.19**	**F (98)**	**1.44**	**E (69)**	**1.22**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (287)	1.53	F (94)	0.96	F (341)	1.66	F (104)	0.98
		T	D (48)	0.70	E (58)	0.84	D (49)	0.71	E (78)	0.91
		R	A (2)	0.13	-	-	A (2)	0.13	E (78)	0.91
	WB	L	D (41)	0.55	D (51)	0.70	D (41)	0.56	E (75)	0.81
		T	E (73)	0.87	E (67)	0.84	E (73)	0.88	F (114)	1.00
		R	E (64)	0.99	D (47)	0.92	E (64)	0.99	D (38)	0.85
	NB	L	F (102)	0.79	F (88)	0.72	F (103)	0.80	D (55)	0.31
		TR	E (64)	0.79	E (70)	0.85	E (64)	0.79	F (83)	0.89
	SB	L	F (123)	1.09	F (110)	1.04	F (124)	1.09	E (78)	0.88
		T	E (69)	0.89	E (69)	0.89	E (70)	0.89	F (101)	0.96
		R	B (12)	0.69	B (13)	0.70	B (13)	0.69	B (17)	0.74
	Overall		**F (88)**	**1.53**	**E (64)**	**1.04**	**F (97)**	**1.66**	**E (74)**	**1.00**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (24)	0.62	C (24)	0.62	C (24)	0.61	C (23)	0.61
		R	D (37)	0.89	D (37)	0.89	D (37)	0.89	C (35)	0.89
	NB	T	B (13)	0.74	B (13)	0.74	B (14)	0.75	B (10)	0.70
	SB	L	C (33)	0.80	C (33)	0.80	C (33)	0.80	D (43)	0.97
		T	B (16)	0.61	B (16)	0.61	B (17)	0.61	B (11)	0.61
	Overall		**C (21)**	**0.89**	**B (19)**	**0.97**	**C (21)**	**0.89**	**B (19)**	**0.97**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	C (35)	0.81	D (40)	0.84	C (34)	0.80	D (39)	0.84
		LT	C (35)	0.81	D (40)	0.84	C (35)	0.80	D (40)	0.84
		R	C (27)	0.81	C (27)	0.81	C (27)	0.81	C (27)	0.82
	NB	L	F (95)	1.12	E (78)	1.07	F (105)	1.15	F (86)	1.10
		T	A (4)	0.44	A (5)	0.43	A (4)	0.44	A (5)	0.43
	SB	T	F (95)	1.02	F (95)	1.02	F (94)	1.03	F (94)	1.03
		R	C (24)	0.72	C (23)	0.71	C (25)	0.74	C (23)	0.73
	Overall		**D (48)**	**1.12**	**D (47)**	**1.07**	**D (49)**	**1.15**	**D (48)**	**1.10**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XX (continued)
Future vs Alternate Land Use Code PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		Proposed Action (LUC 150)				Alternative Action (LUC 130)			
			Build		Build w/ Mit.		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (33)	0.37	-	-	C (33)	0.37	-	-
	WB	LTR	C (34)	0.46	-	-	C (34)	0.46	-	-
	NB	L	A (6)	0.13	-	-	A (6)	0.13	-	-
		TR	B (17)	0.77	-	-	B (18)	0.79	-	-
	SB	L	A (10)	0.19	-	-	B (10)	0.20	-	-
		TR	A (7)	0.72	-	-	A (7)	0.72	-	-
	Overall		**B (13)**	**0.77**	**-**	**-**	**B (14)**	**0.72**	**-**	**-**
Airmont Road (CR 89) & Montebello Road (CR 64)/ Rella Boulevard	EB	LT	C (28)	0.48	-	-	C (27)	0.51	-	-
		R	C (25)	0.69	-	-	C (25)	0.71	-	-
	WB	L	C (24)	0.19	-	-	C (23)	0.18	-	-
		T	C (23)	0.08	-	-	C (22)	0.07	-	-
		R	C (24)	0.19	-	-	C (23)	0.18	-	-
	NB	L	D (39)	0.90	-	-	D (49)	0.94	-	-
		TR	A (8)	0.50	-	-	B (14)	0.51	-	-
	SB	L	A (9)	0.09	-	-	A (10)	0.10	-	-
		TR	B (17)	0.61	-	-	B (18)	0.63	-	-
	Overall		**B (18)**	**0.90**	**-**	**-**	**C (22)**	**0.94**	**-**	**-**
Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway	EB	LT	C (31)	0.29	-	-	C (31)	0.29	-	-
		T	C (30)	0.53	-	-	C (30)	0.53	-	-
	WB	LTR	C (31)	0.11	-	-	C (31)	0.11	-	-
	NB	L	A (6)	0.23	-	-	A (6)	0.24	-	-
		TR	A (1)	0.44	-	-	A (1)	0.44	-	-
	SB	L	A (5)	0.01	-	-	A (5)	0.01	-	-
		T	A (8)	0.54	-	-	A (8)	0.55	-	-
		R	A (5)	0.04	-	-	A (5)	0.04	-	-
	Overall		**A (7)**	**0.54**	**-**	**-**	**A (7)**	**0.55**	**-**	**-**
Hemion Road (CR 93) & Dunnigan Drive	WB	LR	c (18)	0.172	-	-	c (19)	0.188	-	-
	SB	L	a (9)	0.007	-	-	a (9)	0.007	-	-
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	b (13)	0.286	-	-	b (13)	0.298	-	-
	NB	LR	d (34)	0.565	-	-	e (39)	0.609	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table XX (continued)
Future vs Alternate Land Use Code PM Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		Proposed Action (LUC 150)				Alternative Action (LUC 130)			
			Build		Build w/ Mit.		Build		Build w/ Mit.	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive	EB	L	-	-	b (14)	0.438	-	-	A (6)	0.41
	WB	L	a (8)	0.188	d (27)	0.753	a (9)	0.195	B (19)	0.62
		TR							B (13)	0.48
	NB	LTR	f (118)	1.152	e (38)	0.877	f (168)	1.284	B (14)	0.69
	SB	LTR	c (22)	0.051	b (11)	0.022	c (24)	0.056	A (6)	0.01
	Overall		**-**	**-**	**-**	**-**	**-**	**-**	**B (13)**	**0.69**
Airmont Road (CR 89) & Dunnigan Drive/Interstate Waste Services Driveway	EB	LT	f (228)	1.050	-	-	f (529)	1.661	-	-
		R	c (16)	0.129	-	-	c (16)	0.129	-	-
	WB	LTR	b (14)	0.043	-	-	c (15)	0.047	-	-
	NB	L	b (12)	0.033	-	-	b (12)	0.033	-	-
	SB	L	b (13)	0.007	-	-	b (14)	0.008	-	-
Hemion Road (CR 93) & Suffern Middle School Driveway/Ramapo Cirque Boulevard	EB	L	c (21)	0.113	-	-	c (24)	0.126	-	-
		R	b (11)	0.014	-	-	b (11)	0.015	-	-
	NB	L	a (8)	0.012	-	-	a (8)	0.012	-	-
	SB	L	a (9)	0.036	-	-	a (9)	0.038	-	-
Hemion Road (CR 93) & Suffern Middle School Egress Driveway	WB	LR	c (15)	0.182	-	-	c (17)	0.199	-	-
Montebello Road (CR 93) & Suffern Middle School Driveway	WB	L	a (8)	0.025	-	-	a (8)	0.026	-	-
	NB	LR	c (18)	0.205	-	-	c (20)	0.224	-	-
Montebello Road (CR 93) & Montebello Elementary School Driveway	WB	L	a (9)	0.019	-	-	a (9)	0.020	-	-
	NB	LR	b (14)	0.222	-	-	b (14)	0.235	-	-
Hemion Road (CR 93) & Old Mill Road	EB	LR	d (34)	0.427	-	-	f (73)	0.808	-	-
	NB	L	b (11)	0.052	-	-	b (10)	0.058	-	-
Hemion Road (CR 93) & Site Driveway	EB	L	d (32)	0.490	-	-	f (86)	0.929	-	-
	NB	L	a (9)	0.023	-	-	a (9)	0.034	-	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

SITE PLAN

Site Access and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As noted previously, access to The Project will be provided via two full movement driveways along Old Mill Road, which ultimately connects to Hemion Road (CR 93) and via a full movement driveway at the south end of the site along Hemion Road (CR 93). Trucks will be restricted to left turn in/right turn in/right turn out movements at the Old Mill Road intersection with Hemion Road (CR 93)

The parking lots will be serviced by parking aisles with a width of 24', which satisfies the Ordinance's minimum requirements of 24'. These aisles will allow for two-way circulation and 90 degree parking. Circulation between the driveway and buildings will be services by aisles with a width of 36'. Truck loading areas, will be serviced by aisles with a width of 70'. Review of the site plan design indicates that the site can sufficiently accommodate a large wheel base vehicle, such as a single unit truck (SU), or a tractor with a 53' trailer, along with the automobile traffic anticipated.

The security gate is proposed to be located over 1750' from where the driveway meets Hemion Road, which is more than ample throat length to accommodate potential queuing vehicles and trucks.

Loading areas are to be located on both sides of Building 1 and on one side of Buildings 2 and 3, separated from the employee parking areas. A bypass truck aisle is provided for Building 1 so trucks can travel past the building without interfering with loading movements. Trucks are anticipated to enter the site, complete their necessary loading and/or unloading, park their trailer within one of the trailer parking spaces, and then exit the site. The use of yard jockeys is not anticipated, and all trucks will be equipped by backup beepers as required by law.

Parking

The Village of Suffern Ordinance sets forth a parking requirement of 3.3 parking spaces per 1,000 square feet of sales and office area and 1 parking space per 3 employees on the largest shift for warehouse uses. This equates to a parking requirement of 178 spaces for Building 1 with 21,000 SF of office space and 324 employees on the maximum shift, 30 spaces for Building 2 with 3,200 SF of office space and 56 employees on the maximum shift, and 22 spaces for Building 3 with 3,200 SF of office space and 33 employees on the maximum shift. This equates to a total requirement of 230 parking spaces. The site as proposed provides 661 parking spaces, and as such, the Ordinance requirement is satisfied. It is also required to provide a parking space for each commercial vehicle to be stored on the site. The site as proposed provides 238 trailer parking spaces, which is anticipated to be sufficient to support the demands of the site.

It is proposed to provide passenger vehicle parking stalls with dimensions of 9'x18', which satisfy the Ordinance minimum requirement of 9'x18'. It is also proposed to provide trailer parking stalls that measure 13'x55', which are a sufficient size to park 53' trailers.

The Ordinance also sets forth a loading requirement of 1 loading space per the first 1,500 SF and 1 loading space for each additional 10,000 SF of floor area for warehouse uses. This equates to a loading requirement of 95 loading spaces for Building 1 with 942,100 SF of warehouse floor area, 17 loading spaces for Building 2 with 85,000 SF of warehouse floor area, and 17 loading spaces for Building 3 with 85,000 SF of warehouse floor area. This equates to a total loading space requirement of 121 loading spaces for the Project. The site as proposed provides 194 loading spaces and the Ordinance requirement is satisfied. It is proposed to provide loading spaces that measure 14'x60', which complies with general engineering standards for loading space size.

Sight Distance Analysis

In order to determine whether the available sight distances for the Old Mill Road and site driveway intersections along Hemion Road (CR 93) are acceptable, the available sight distances at the unsignalized intersections were reviewed relative to the required Stopping Sight Distance and Intersection Sight Distance requirements from the American Association of State Highway Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets*. Table XX below provides a summary of the required and available sight distances.

Table XX
Sight Distance Requirements – Old Mill Road & Hemion Road (CR 93) Site Driveway

Intersection	Direction	Posted Speed Limit	Grade	Stopping Sight Distance	Intersection Sight Distance	Available Sight Distance
Hemion Road (CR 93) & Old Mill Road	Looking left from Old Mill Road	30 MPH	-4%	261 feet	390 feet (540 feet for truck right turn out only)	>400 feet (>550 feet for trucks)
	Looking right from Old Mill Road	30 MPH	0%[1]	250 feet	390 feet	>400 feet
Hemion Road (CR 93) & Site Driveway	Looking left from Site Driveway	30 MPH	0%[1]	250 feet	390 feet	>400 feet
	Looking right from Site Driveway	30 MPH	-4%	261 feet	390 feet	>400 feet

[1] – Approaching vehicles experience an uphill grade. Conservatively, a grade of 0% was utilized in this calculation.

As shown in the above table, the sight distances available for Old Mill Road and the site driveway satisfy the AASHTO Stopping Sight Distance and Intersection Sight Distance standards. Minor vegetative clearing within the right-of-way may be required in order to ensure that the sight distance is maintained.

FINDINGS & CONCLUSIONS

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed warehouse development is projected to generate 186 entering trips and 56 exiting trips during the weekday morning peak hour and 71 entering trips and 186 exiting trips during the weekday evening peak hour that are "new" to the adjacent roadway network.

- Access to the site will be provided via two full movement driveways along Old Mill Road, which ultimately connects to Hemion Road (CR 93) and via a full movement driveway at the south end of the site along Hemion Road (CR 93).

- With the addition of site generated traffic, proposed intersection improvements and signal retiming, the intersection of Lafayette Avenue (NYS Route 59) and Campbell Avenue/Hemion Road (CR 93) is anticipated to operate at comparable levels of service and delays to No Build conditions during the peak hours studied. As part of The Project, it is proposed to widen the eastbound approach to extend the eastbound left turn lane to provide 475 FT of storage length and to reconfigure the approach to provide a dedicated left turn lane, a dedicated through lane and a shared through/right turn lane. Additionally, it is proposed to widen the southbound approach to provide dual southbound left turn lanes with a storage length of 175 FT and to modify the radius on the northeast corner of the intersection to facilitate tractor trailer turning maneuvers.

- With the addition of site generated traffic, proposed intersection improvements and signal retiming, the intersection of Lafayette Avenue (NYS Route 59) and Airmont Road (CR 89) is anticipated to operate at comparable levels of service and delays to No Build conditions during the peak hours studied. As part of The Project, it is proposed to widen and reconfigure the eastbound approach of the intersection to provide dual dedicated left turn lanes and to modify the radius on the northwest corner of the intersection to help facilitate southbound right turn movements for tractor trailers.

- With the addition of site generated traffic and a minor signal timing adjustment, the intersection of Airmont Road (CR 89) and the I-87 SB/I-287 EB Ramps is anticipated to operate at overall levels of service "E" or better during the analyzed peak hours.

- With the addition of site generated traffic and a minor signal timing adjustment, the intersection of Airmont Road (CR 89) and the I-87 NB/I-287 WB Ramps is anticipated to operate at No Build overall levels of service "E" or better during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) and North DeBaun Avenue is anticipated to operate at No Build overall level of service "B" with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) Montebello is anticipated to operate at overall levels of service "C" or better during the peak hours studied.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) & Executive Boulevard/Ramapo Hills Professional Center Driveway is anticipated to operate at No Build overall level of service "A" with little to no change in delay during the peak hours studied.

- With the addition of site generated traffic, the intersection of Hemion Road (CR 93) and Dunnigan Drive is anticipated to operate at levels of service "C" or better with little to no change in delay during the peak hours studied.

- With the addition of site generated traffic, the intersection of Lafayette Avenue (NYS Route 59) & Brookside Avenue is anticipated to operate at No Build levels of service "D" or better with little to no change in delay during the peak hours studied.

- With the addition of site generated traffic and the installation of multi-way stop control, the intersection of Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive is anticipated to operate at overall levels of service "E" during the 2026 analysis scenario, with a reduction in queuing for the northbound approach during the peak hours studied.

- With the addition of site generated traffic, the intersection of Airmont Road (CR 89) and Dunnigan Drive/Interstate Waste Services Driveway is anticipated to operate at levels of service consistent with No Build conditions with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Hemion Road (CR 93) and Suffern Middle School Ingress Driveway/Ramapo Cirque Boulevard is anticipated to operate at No Build levels of service "D" or better with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Hemion Road (CR 93) and Suffern Middle School Egress Driveway is anticipated to operate at No Build levels of service "C" or better with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Montebello Road (CR 93) and Suffern Middle School Driveway is anticipated to operate at No Build levels of service "C" or better with little to no change in delay during the analyzed peak hours.

- With the addition of site generated traffic, the intersection of Montebello Road (CR 93) and Montebello Elementary School Drive is anticipated to operate at levels of service "C" or better with little to no change in delay during the analyzed peak hours.

- As designed, the intersection of Hemion Road (CR 93) and Old Mill Road is anticipated to operate at levels of service "E" or better during the peak hours studied.

- As designed, the intersection of Hemion Road (CR 93) and the site driveway is anticipated to operate at levels of service "E" or better during the peak hours studied.

- When utilizing alternate ITE LUC 130 – Industrial Park, the proposed warehouse development is projected to generate 167 entering trips and 50 exiting trips during the weekday morning peak hour and 63 entering trips and 163 exiting trips during the weekday evening peak hour that are "new" to the adjacent roadway network. As noted, the current development proposal does not provide sufficient parking to accommodate the ITE average peak parking demand for LUC 130 and therefore is not anticipated to be develop with an industrial park type use.

- Under the conservative LUC 130 analysis, the following mitigation measures would be required:

    - Roadway widening, the construction of a dedicated westbound left turn lane, and signalization of the intersection Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64).
    - Signalization of the intersection of Hemion Road (CR 93) & Old Mill Road.

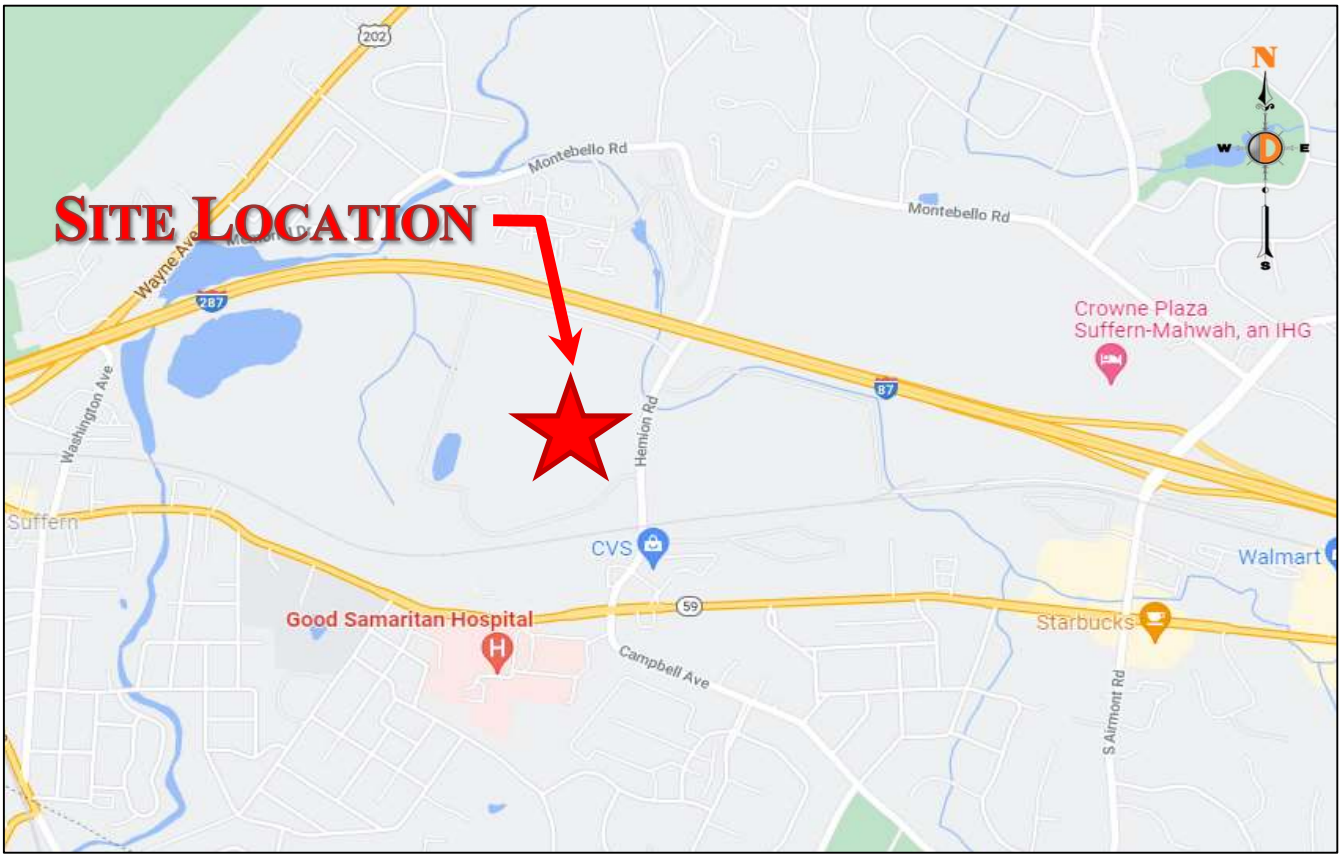
- As proposed, The Project's site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles and large wheel base vehicles.

- The proposed parking supply and design is sufficient to support the projected demand and satisfies the Ordinance requirements.

Conclusions

Based upon our Traffic Impact Study as detailed in the body of this report, it is the professional opinion of Dynamic Traffic LLC that the adjacent street system of the Village of Suffern, the Village of Montebello, Rockland County, and NYSDOT will not experience any significant degradation in operating conditions with the construction of The Project. The site driveway is located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

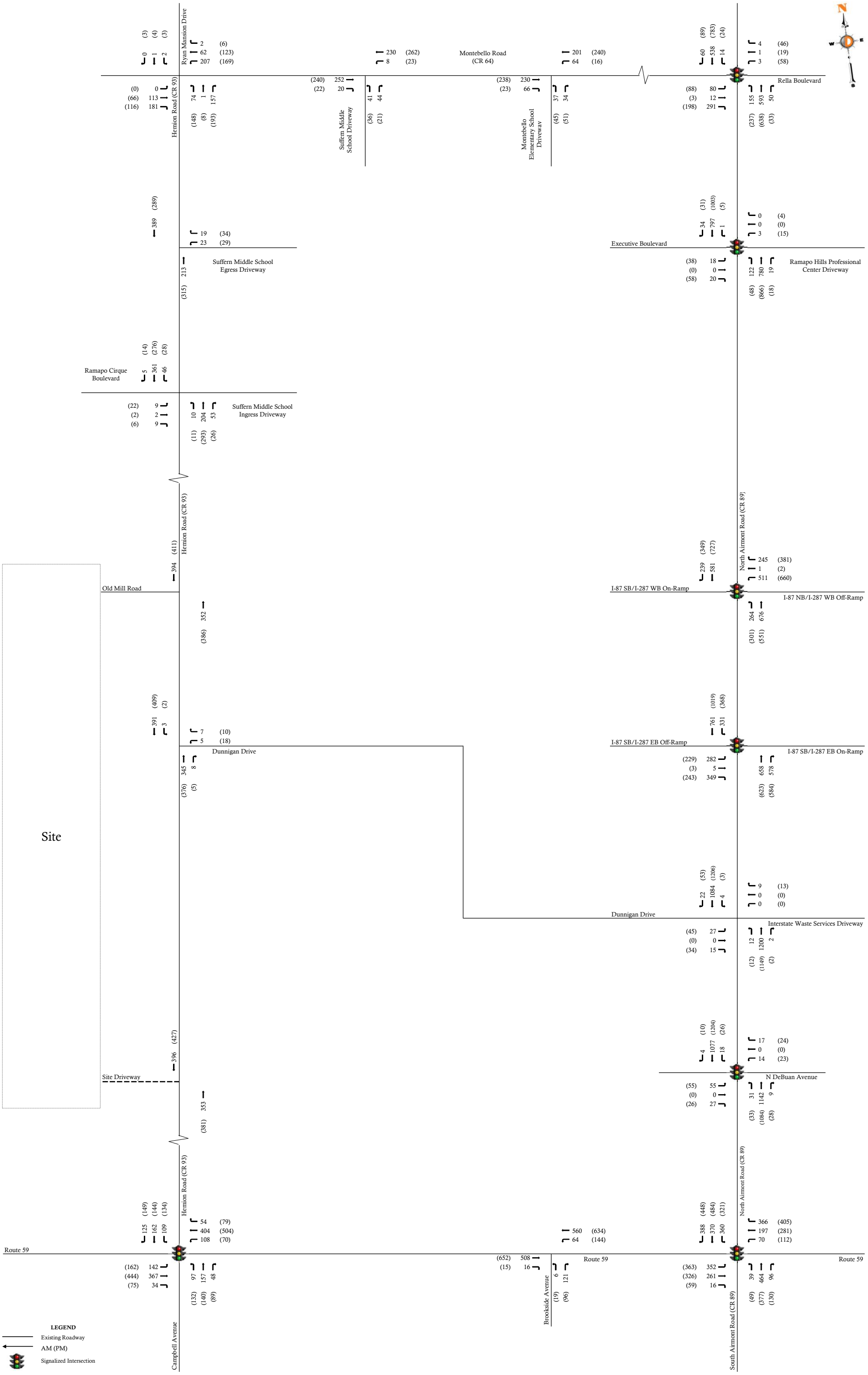
Appendix A
Traffic Volume Figures



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 1

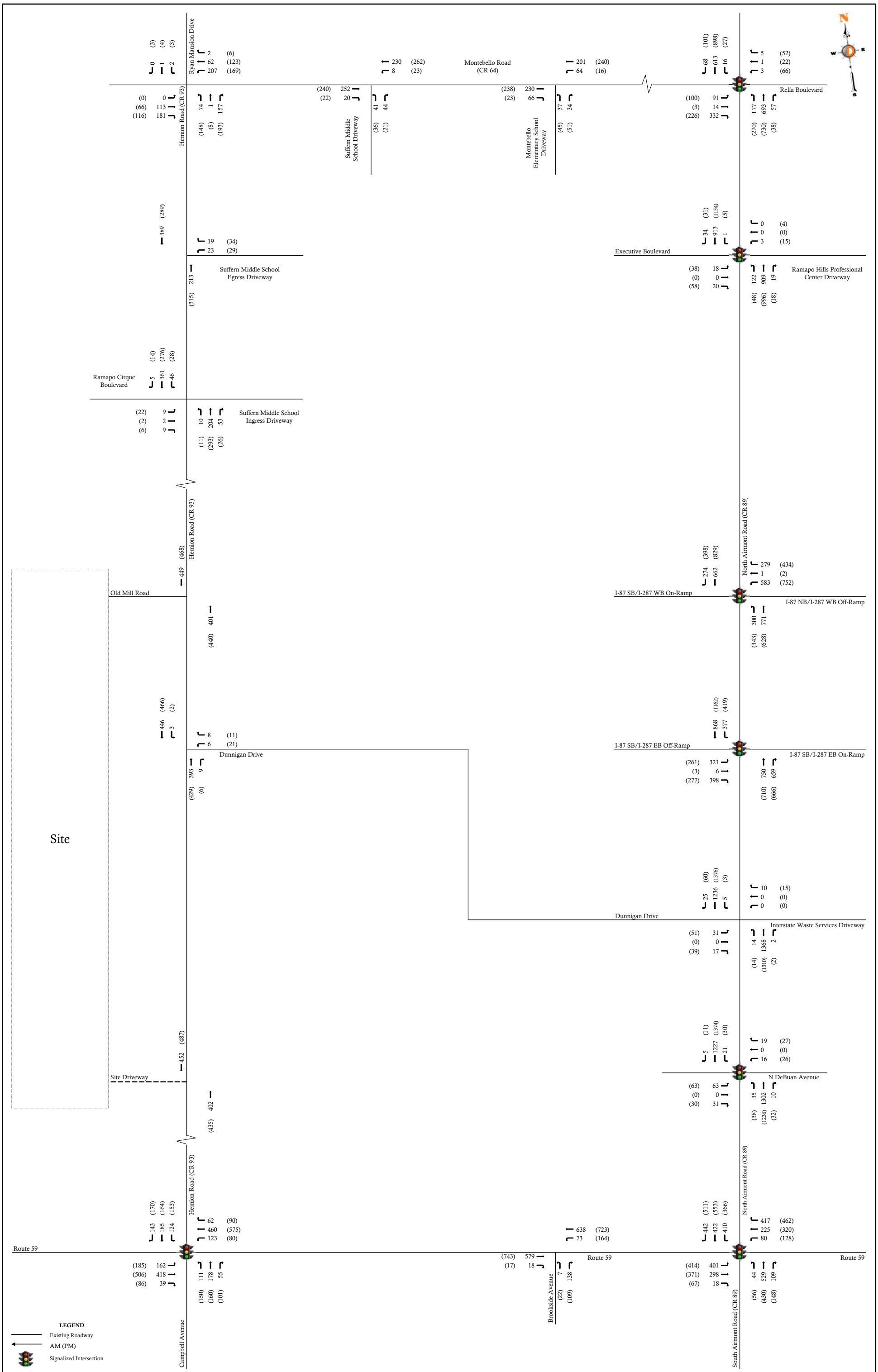
Site Location Map



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 2

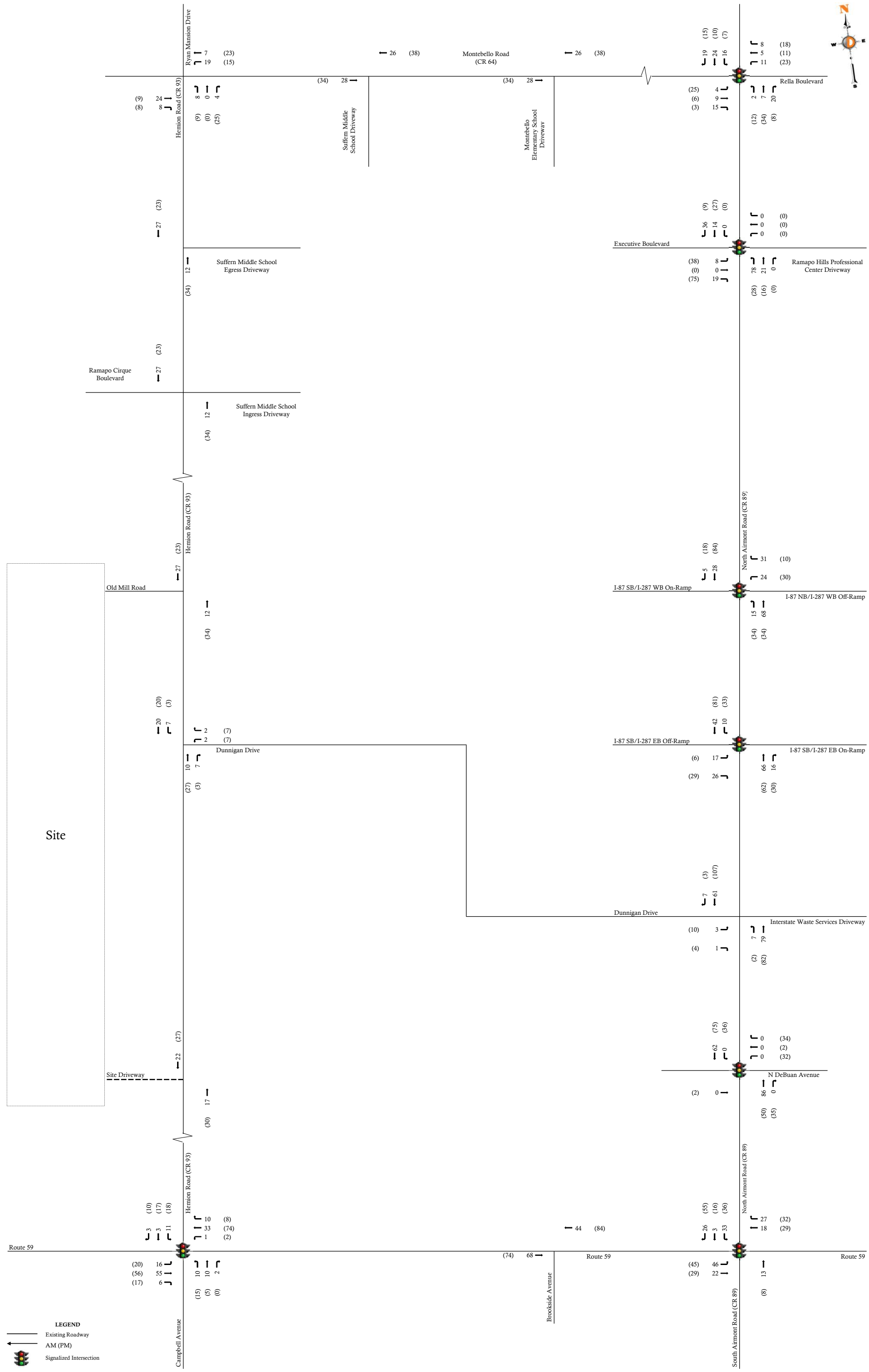
Existing Traffic Volumes



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 3

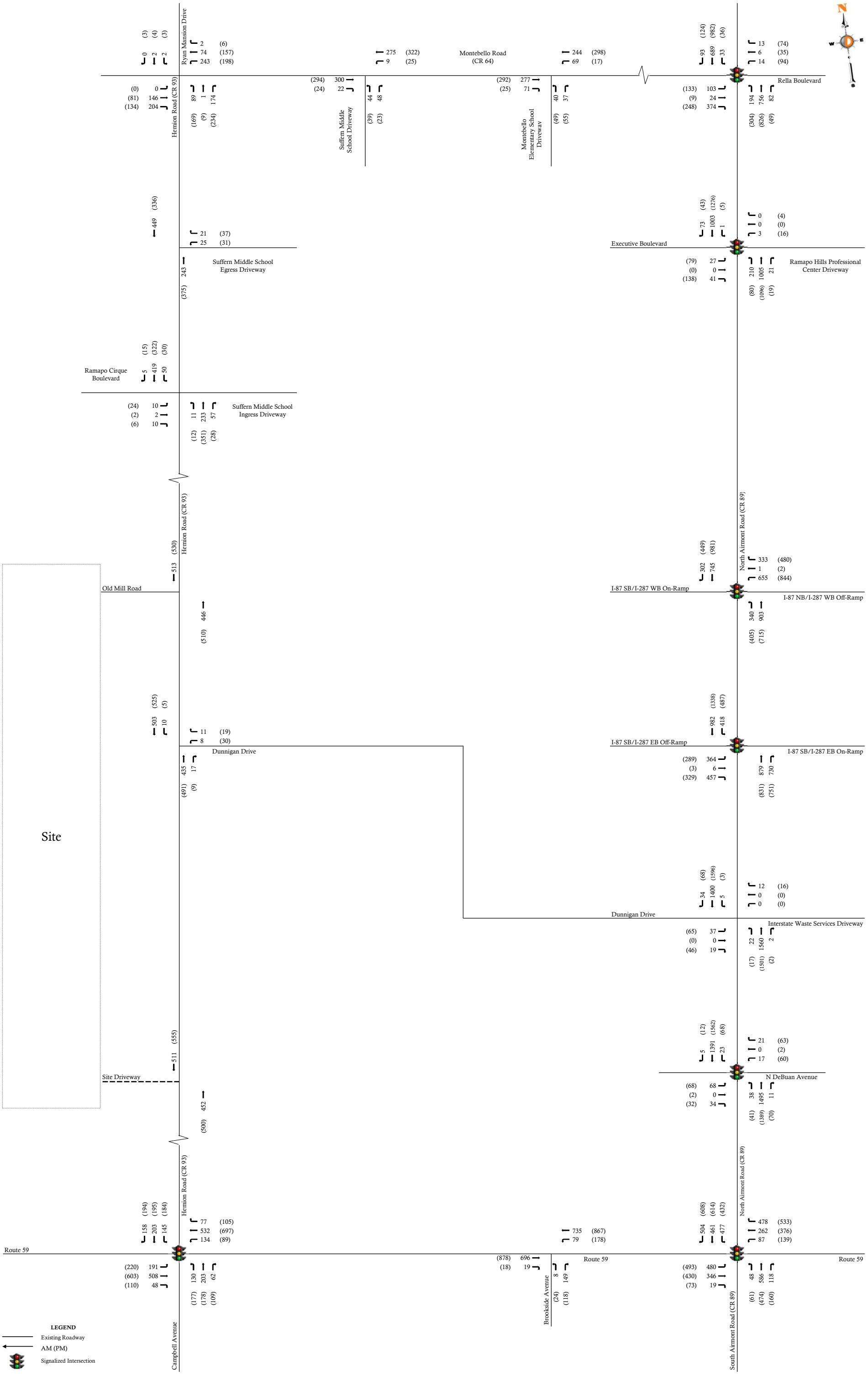
Adjusted Existing Traffic Volumes



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 4

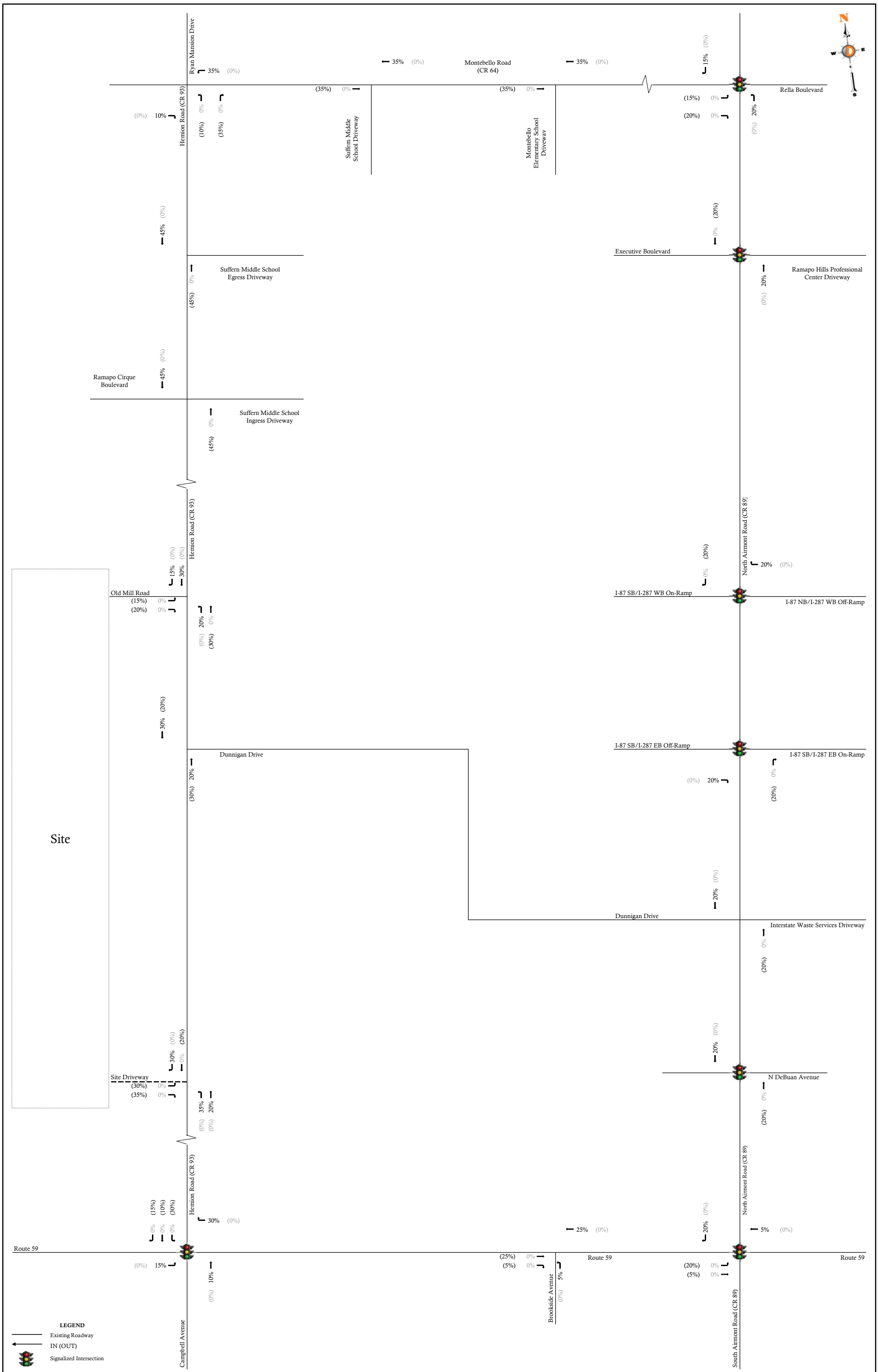
Adjacent Development Traffic Volumes [TOTAL]



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 5

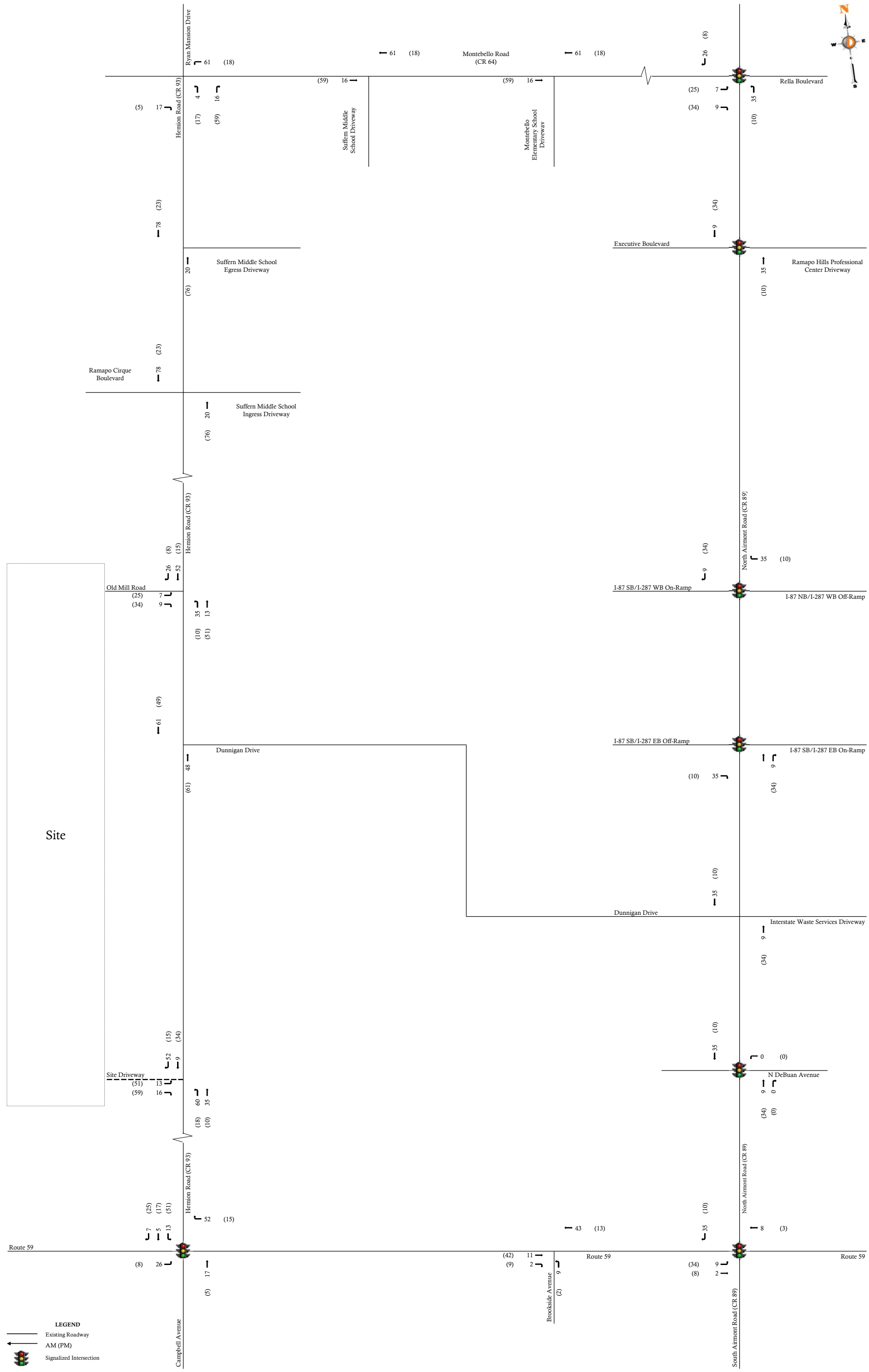
2026 No Build Traffic Volumes



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 6

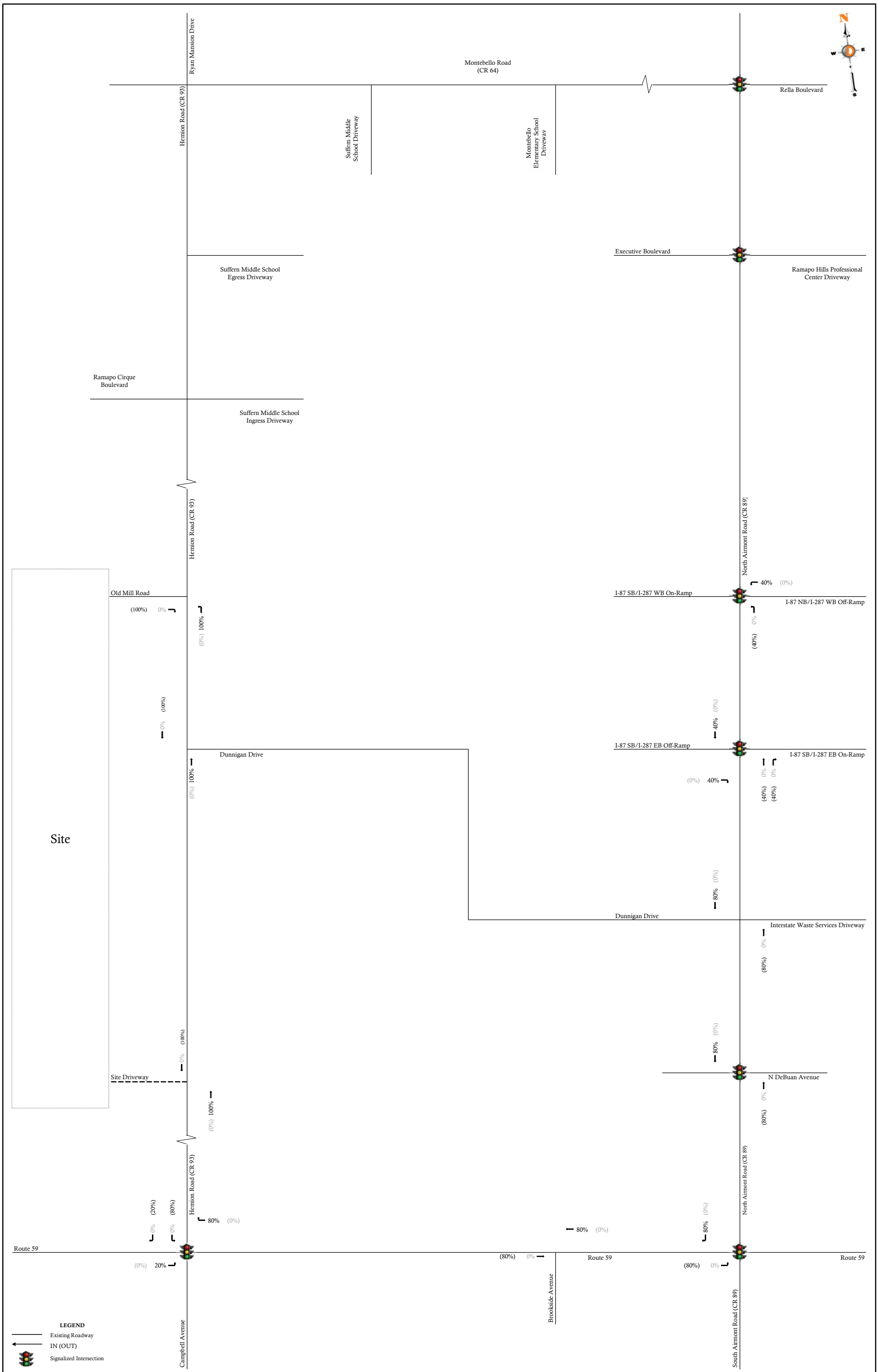
Percent Distribution (Automobile Trips)



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 7

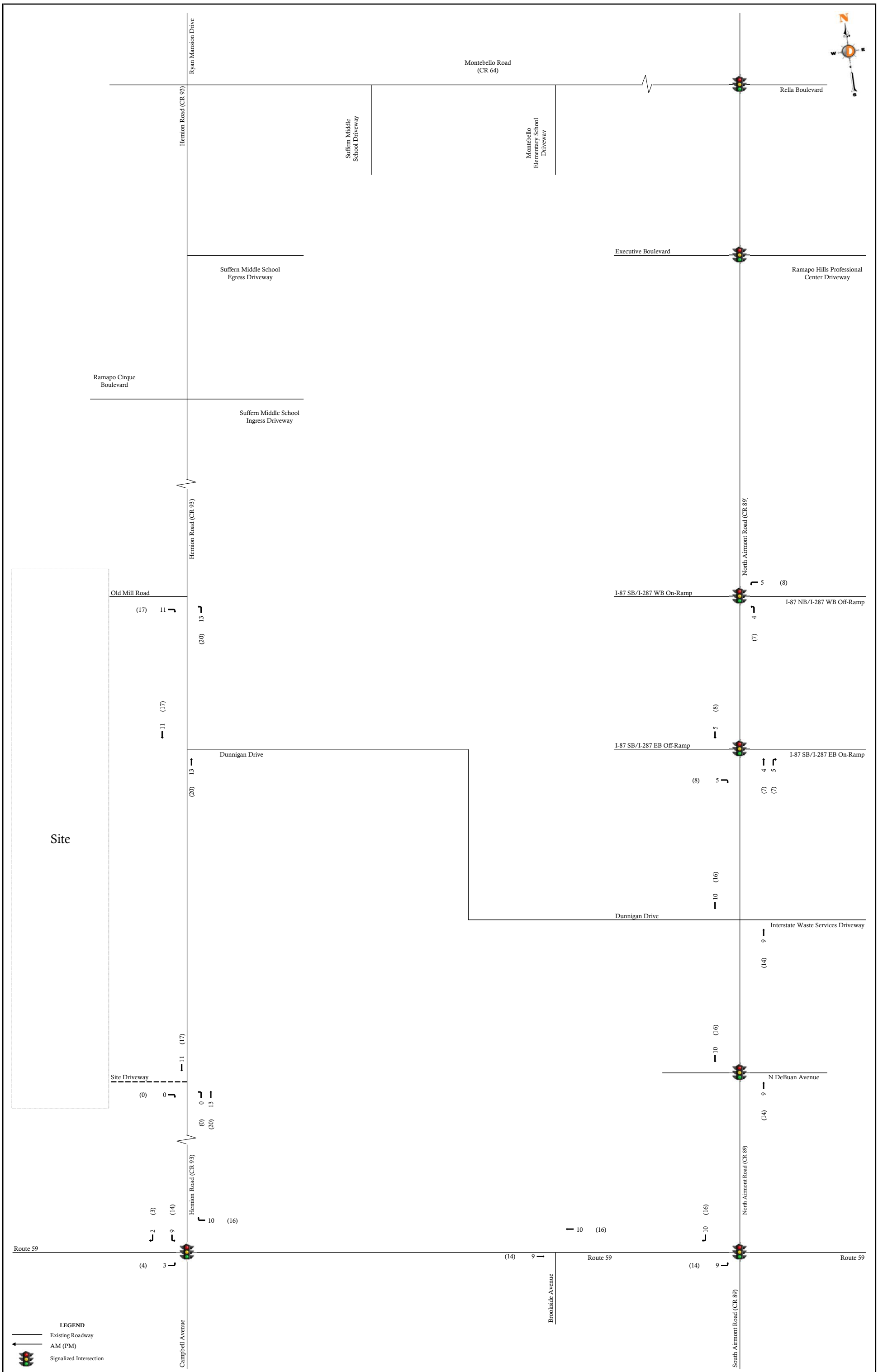
Automobile Site Generated Trips



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 8

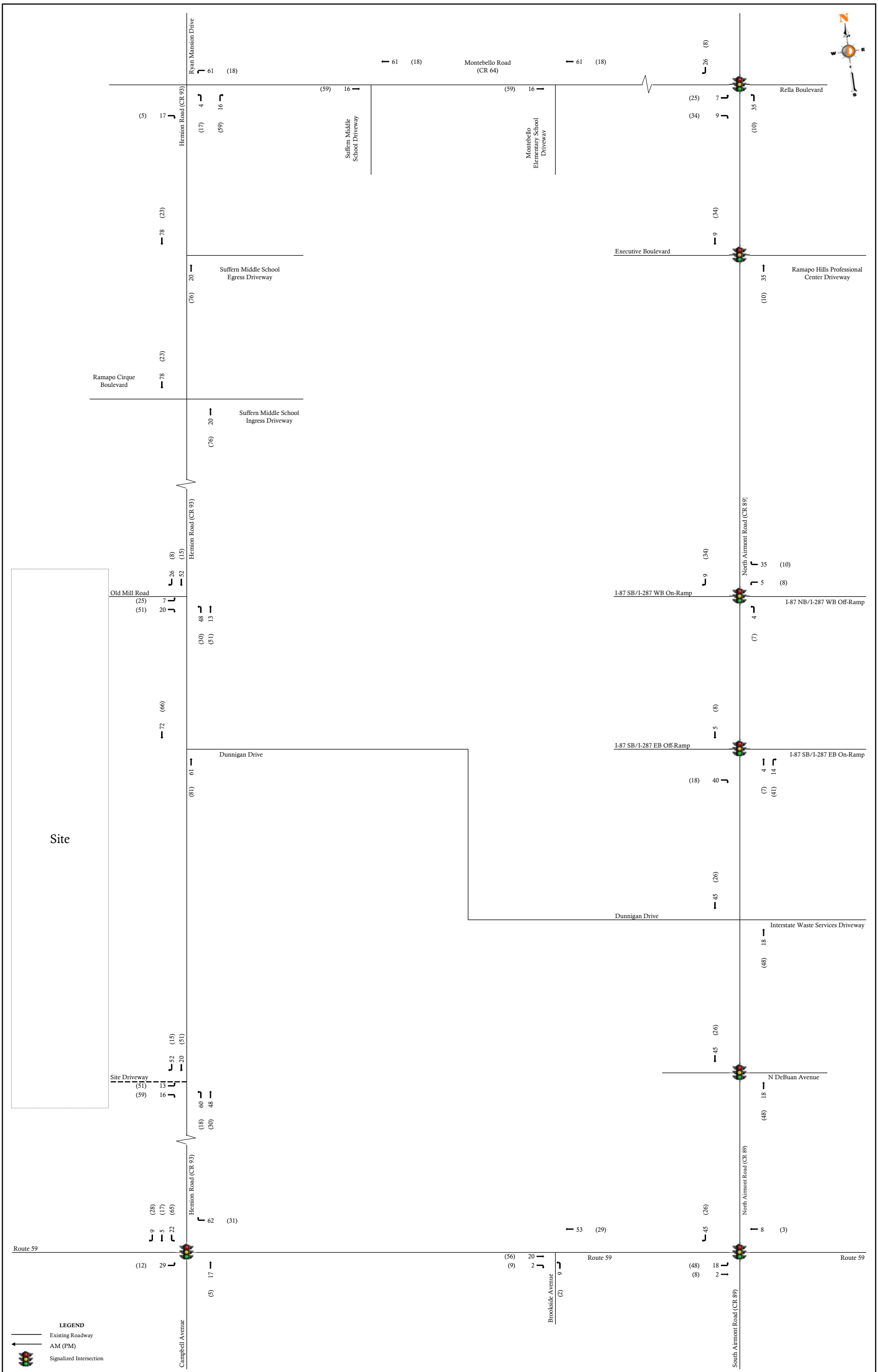
Percent Distribution (Truck Trips)



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 9

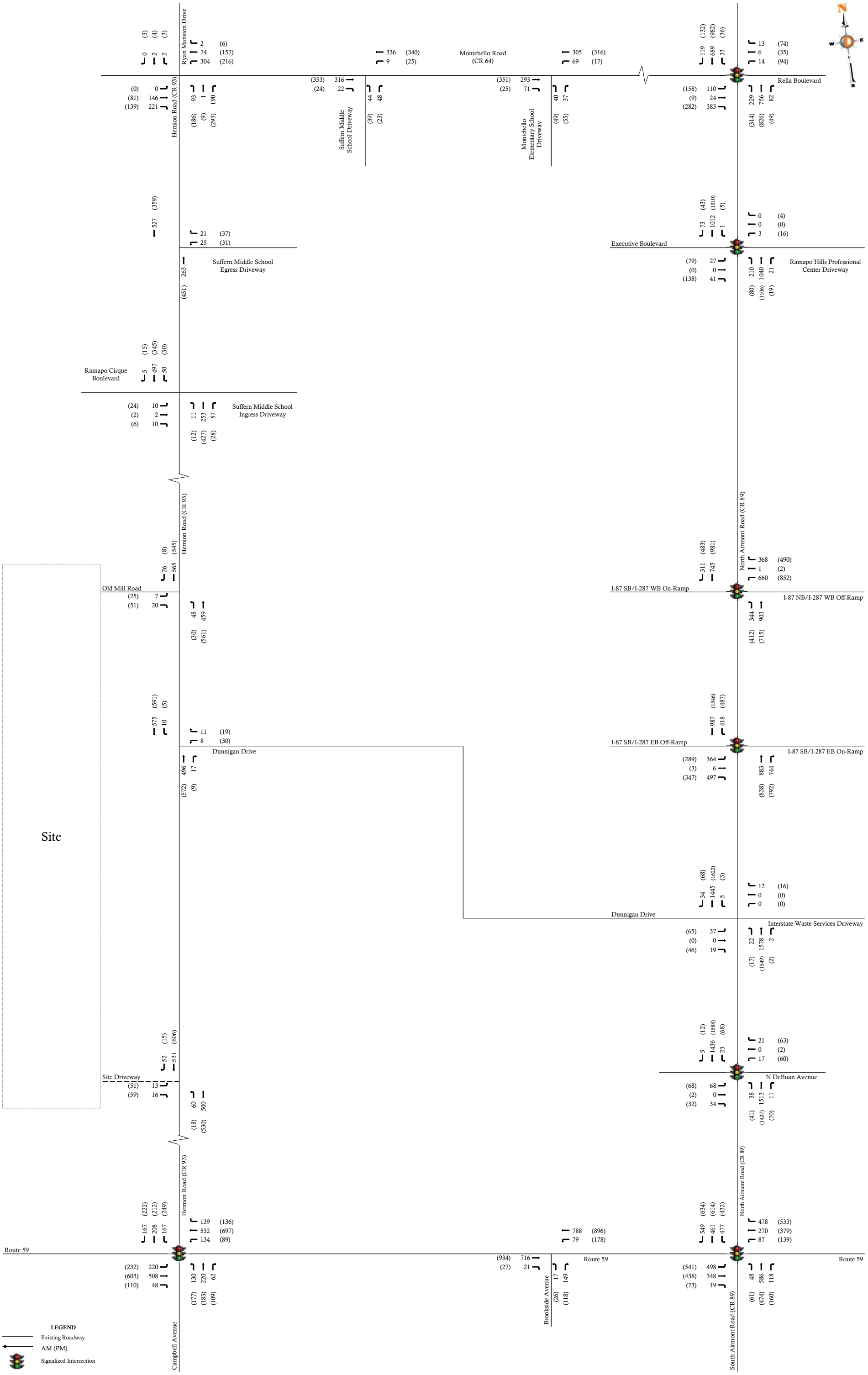
Truck Site Generated Trips



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 10

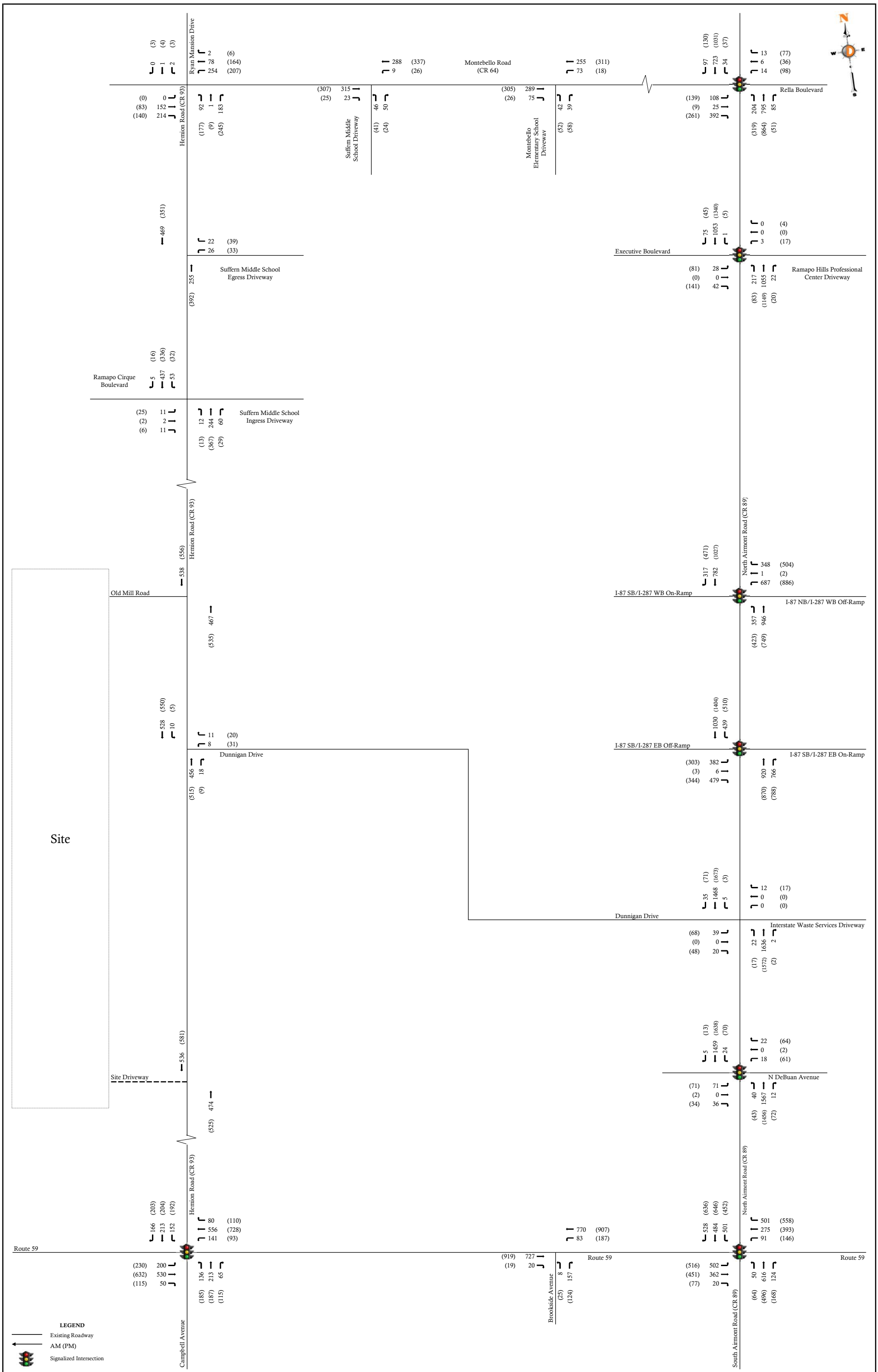
Total Site Generated Trips



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 11

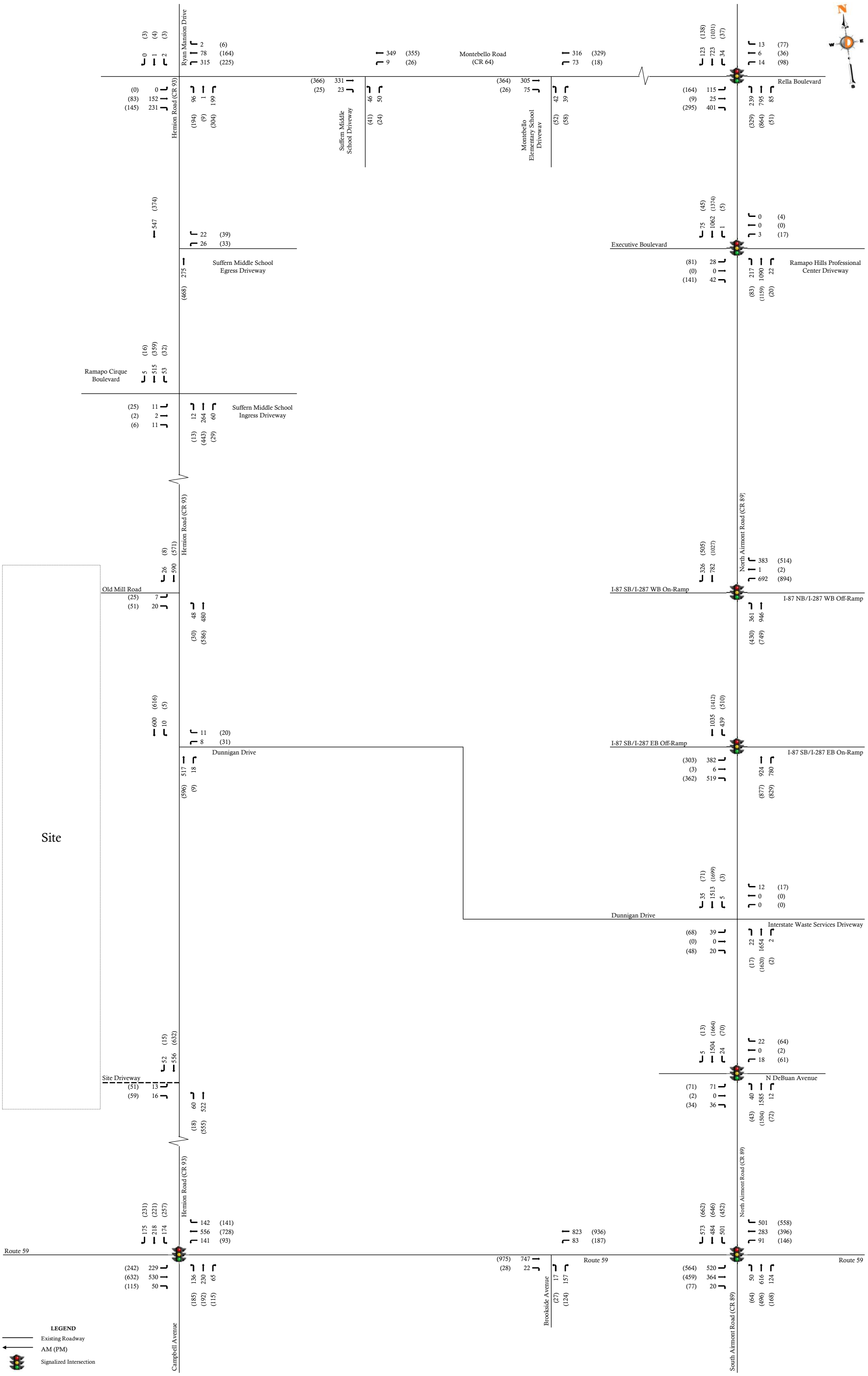
2026 Build Traffic Volumes



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 12

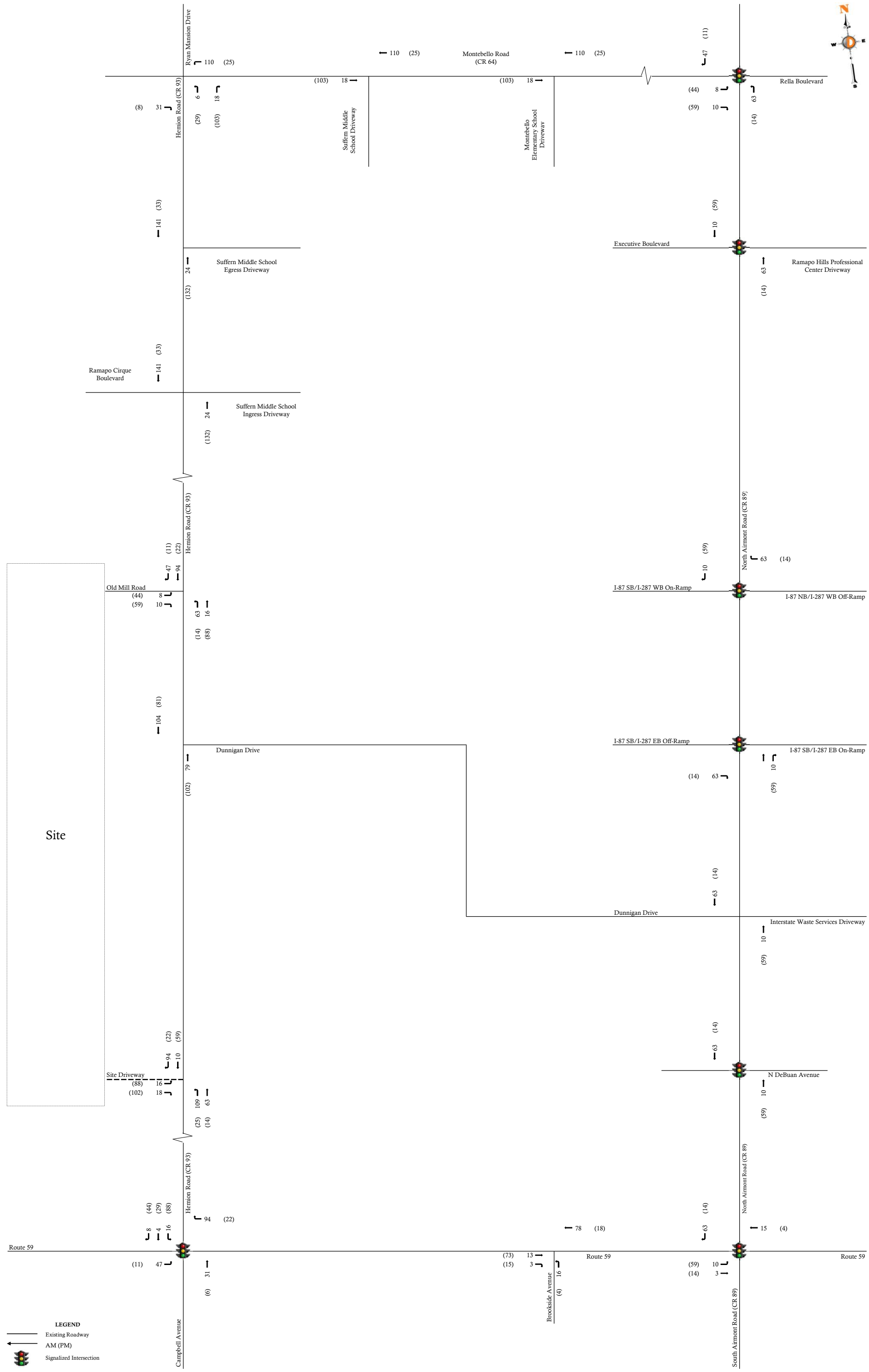
2036 Design Year No Build Traffic Volumes



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 13

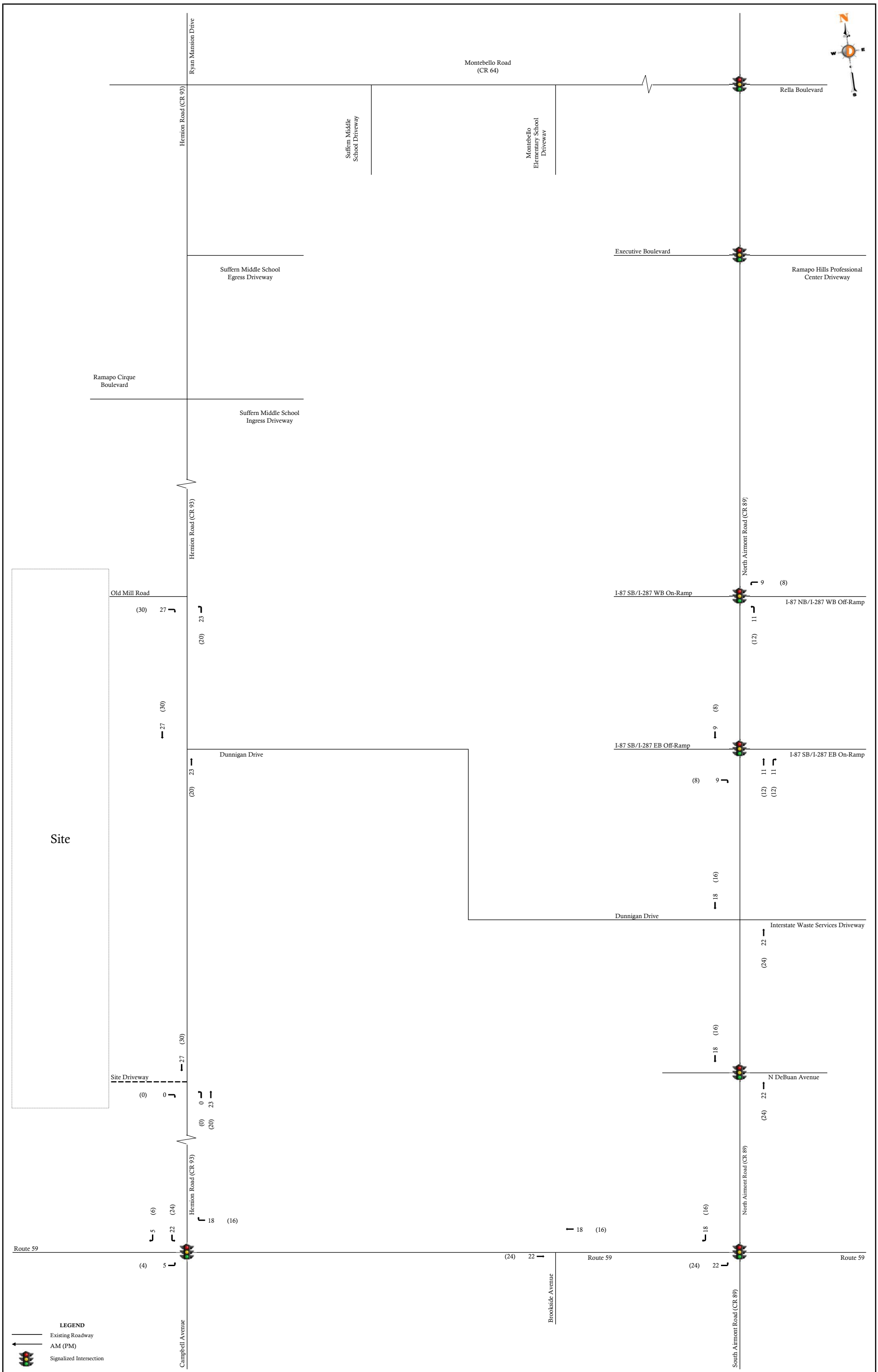
2036 Design Year Build Traffic Volumes



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 14

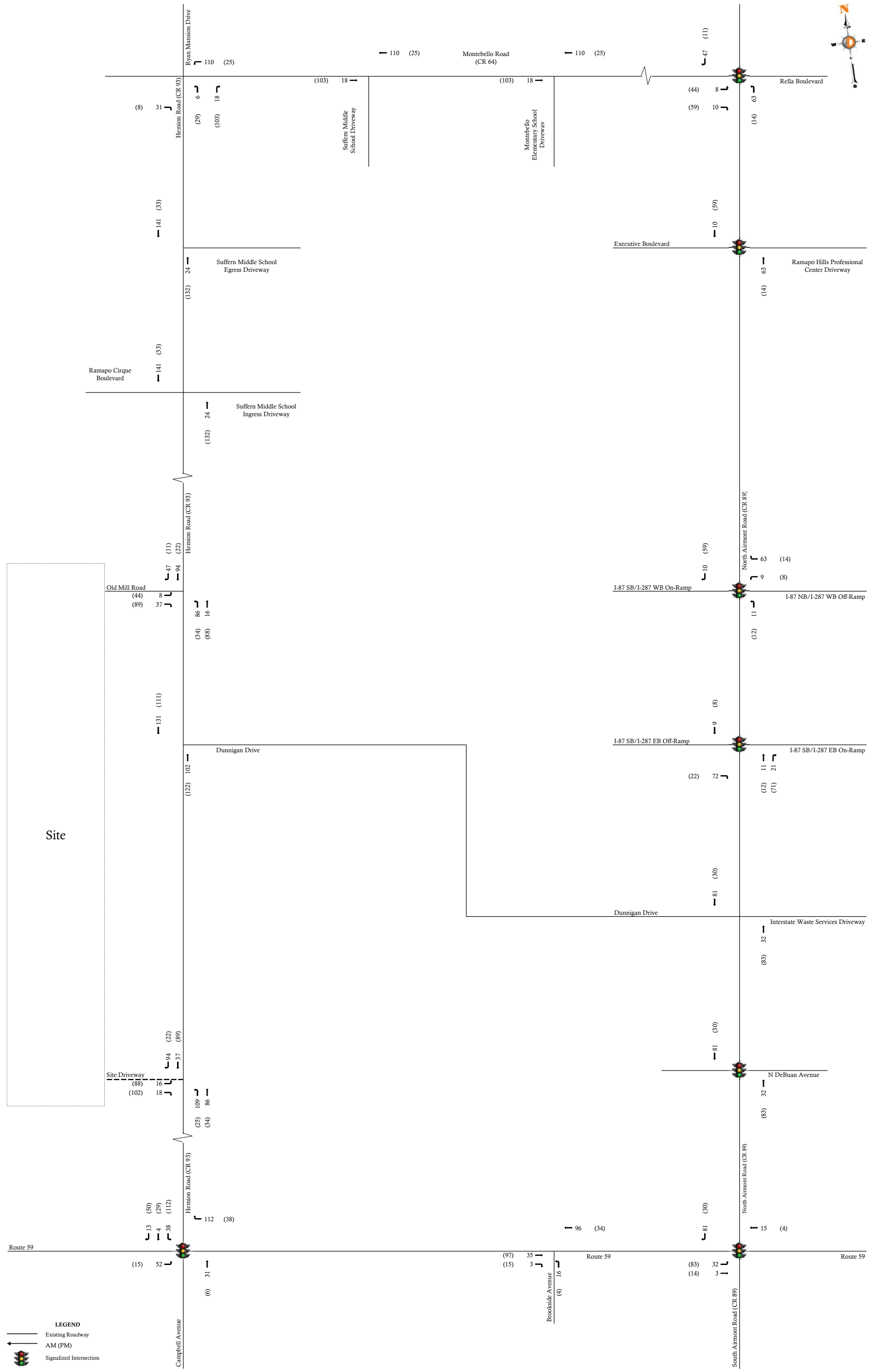
Automobile Site Generated Trips - LUC 130



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 15

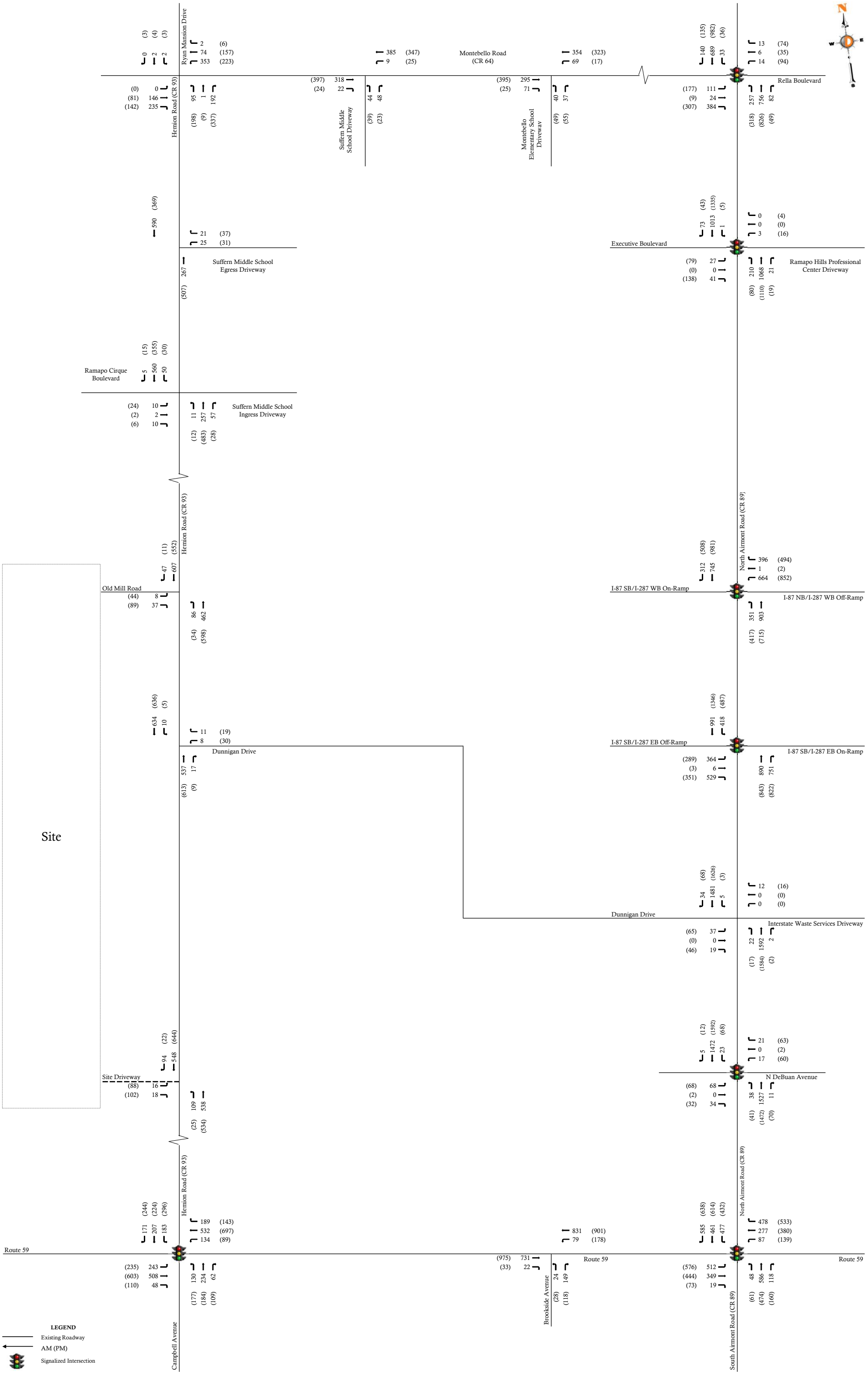
Truck Site Generated Trips - LUC 130



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 16

Total Site Generated Trips - LUC 130



Proposed Industrial Park
Traffic Impact Study
3709-99-004T

Figure 17

2026 Build Traffic Volumes - LUC 130

Appendix B
Project Information

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W:Lafayette Avenue
N/S : Campbell Avenue/Hemion Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Lafayette Avenue (NY 59) and Hemion Road (CR 93)
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Lafayette Avenue Eastbound					Lafayette Avenue Westbound					Campbell Avenue Northbound					Hemion Road Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	26	56	8	0	90	22	58	11	0	91	11	37	10	0	58	14	14	12	0	40	279
07:15 AM	16	61	11	0	88	14	57	11	0	82	14	19	10	0	43	14	27	26	0	67	280
07:30 AM	44	97	14	0	155	37	62	15	0	114	16	57	16	0	89	21	24	12	0	57	415
07:45 AM	55	82	8	0	145	27	87	18	0	132	18	71	11	0	100	23	58	40	0	121	498
Total	141	296	41	0	478	100	264	55	0	419	59	184	47	0	290	72	123	90	0	285	1472
08:00 AM	25	83	10	0	118	24	65	11	0	100	10	27	13	0	50	30	27	35	0	92	360
08:15 AM	31	93	8	0	132	24	75	9	1	109	21	18	15	1	55	22	34	25	2	83	379
08:30 AM	31	95	8	0	134	33	77	16	0	126	18	41	8	0	67	22	28	17	0	67	394
08:45 AM	32	62	15	0	109	23	82	11	0	116	22	39	14	0	75	39	43	28	1	111	411
Total	119	333	41	0	493	104	299	47	1	451	71	125	50	1	247	113	132	105	3	353	1544
BREAK																					
03:00 PM	29	76	20	0	125	18	92	14	0	124	32	31	41	2	106	32	43	36	0	111	466
03:15 PM	36	91	22	0	149	21	109	16	0	146	30	31	24	2	87	29	28	33	1	91	473
03:30 PM	40	105	15	0	160	13	106	17	1	137	28	41	20	1	90	32	32	40	0	104	491
03:45 PM	40	96	14	0	150	17	91	19	1	128	35	39	13	1	88	35	50	45	0	130	496
Total	145	368	71	0	584	69	398	66	2	535	125	142	98	6	371	128	153	154	1	436	1926
04:00 PM	46	102	24	0	172	19	106	27	0	152	39	29	22	0	90	23	34	31	0	88	502
04:15 PM	42	96	18	0	156	7	103	16	0	126	35	27	19	0	81	33	28	30	1	92	455
04:30 PM	23	104	17	0	144	13	96	16	1	126	26	32	14	0	72	29	25	31	0	85	427
04:45 PM	33	114	21	0	168	16	84	23	0	123	26	44	18	0	88	26	29	28	0	83	462
Total	144	416	80	0	640	55	389	82	1	527	126	132	73	0	331	111	116	120	1	348	1846
05:00 PM	49	93	26	0	168	13	122	28	0	163	27	29	18	0	74	31	31	27	0	89	494
05:15 PM	43	107	23	0	173	8	101	20	0	129	28	35	9	0	72	17	35	27	0	79	453
05:30 PM	28	93	12	0	133	19	103	17	0	139	23	35	8	0	66	32	37	37	0	106	444
05:45 PM	40	84	11	0	135	14	93	15	0	122	25	35	6	0	66	30	36	19	0	85	408
Total	160	377	72	0	609	54	419	80	0	553	103	134	41	0	278	110	139	110	0	359	1799
06:00 PM	44	96	12	0	152	7	75	13	1	96	17	21	12	1	51	33	27	17	0	77	376
06:15 PM	33	112	20	0	165	19	94	71	0	184	16	26	7	0	49	23	16	32	3	74	472
Grand Total	786	1998	337	0	3121	408	1938	414	5	2765	517	764	328	8	1617	590	706	628	8	1932	9435
Apprch %	25.2	64	10.8	0		14.8	70.1	15	0.2		32	47.2	20.3	0.5		30.5	36.5	32.5	0.4		
Total %	8.3	21.2	3.6	0	33.1	4.3	20.5	4.4	0.1	29.3	5.5	8.1	3.5	0.1	17.1	6.3	7.5	6.7	0.1	20.5	
Cars	763	1915	322	0	3000	391	1836	398	5	2630	489	733	313	8	1543	568	670	603	8	1849	9022
% Cars	97.1	95.8	95.5	0	96.1	95.8	94.7	96.1	100	95.1	94.6	95.9	95.4	100	95.4	96.3	94.9	96	100	95.7	95.6
Trucks	5	44	5	0	54	10	59	7	0	76	8	6	7	0	21	10	7	3	0	20	171
% Trucks	0.6	2.2	1.5	0	1.7	2.5	3	1.7	0	2.7	1.5	0.8	2.1	0	1.3	1.7	1	0.5	0	1	1.8
Buses	18	39	10	0	67	7	43	9	0	59	20	25	8	0	53	12	29	22	0	63	242
% Buses	2.3	2	3	0	2.1	1.7	2.2	2.2	0	2.1	3.9	3.3	2.4	0	3.3	2	4.1	3.5	0	3.3	2.6

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Lafayette Avenue (NY 59) and Hemion Road (CR 93)
Site Code : 00000000
Start Date : 6/15/2022

	Lafayette Avenue Eastbound					Lafayette Avenue Westbound					Campbell Avenue Northbound					Hemion Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**55**	82	8	0	**145**	27	**87**	**18**	0	**132**	18	**71**	11	0	**100**	23	**58**	**40**	0	**121**	**498**
08:00 AM	25	83	**10**	0	118	24	65	11	0	100	10	27	13	0	50	**30**	27	35	0	92	360
08:15 AM	31	93	8	0	132	24	75	9	**1**	109	**21**	18	**15**	**1**	55	22	34	25	**2**	83	379
08:30 AM	31	**95**	8	0	134	**33**	77	16	0	126	18	41	8	0	67	22	28	17	0	67	394
Total Volume	142	353	34	0	529	108	304	54	1	467	67	157	47	1	272	97	147	117	2	363	1631
% App. Total	26.8	66.7	6.4	0		23.1	65.1	11.6	0.2		24.6	57.7	17.3	0.4		26.7	40.5	32.2	0.6		
PHF	.645	.929	.850	.000	.912	.818	.874	.750	.250	.884	.798	.553	.783	.250	.680	.808	.634	.731	.250	.750	.819
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	36	91	22	0	149	**21**	**109**	16	0	146	30	31	**24**	**2**	87	29	28	33	**1**	91	473
03:30 PM	40	**105**	15	0	160	13	106	17	**1**	137	28	**41**	20	1	**90**	32	32	40	0	104	491
03:45 PM	40	96	14	0	150	17	91	19	1	128	35	39	13	1	88	**35**	**50**	**45**	0	**130**	496
04:00 PM	**46**	102	**24**	0	**172**	19	106	**27**	0	**152**	**39**	29	22	0	90	23	34	31	0	88	**502**
Total Volume	162	394	75	0	631	70	412	79	2	563	132	140	79	4	355	119	144	149	1	413	1962
% App. Total	25.7	62.4	11.9	0		12.4	73.2	14	0.4		37.2	39.4	22.3	1.1		28.8	34.9	36.1	0.2		
PHF	.880	.938	.781	.000	.917	.833	.945	.731	.500	.926	.846	.854	.823	.500	.986	.850	.720	.828	.250	.794	.977

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W:Lafayette Avenue
N/S : Airmont Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Lafayette Avenue (NY 59) and Airmont Road (CR 89)
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Lafayette Avenue Eastbound					Lafayette Avenue Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	62	40	5	0	107	12	48	44	0	104	4	78	18	0	100	56	30	61	0	147	458
07:15 AM	79	45	4	0	128	19	48	43	0	110	7	53	14	0	74	60	37	65	0	162	474
07:30 AM	84	66	9	0	159	18	44	42	0	104	6	76	27	0	109	78	51	84	0	213	585
07:45 AM	86	63	3	0	152	8	53	60	0	121	12	67	30	0	109	80	49	87	0	216	598
Total	311	214	21	0	546	57	193	189	0	439	29	274	89	0	392	274	167	297	0	738	2115
08:00 AM	90	63	5	0	158	20	35	61	0	116	14	78	22	1	115	109	55	98	0	262	651
08:15 AM	79	73	4	0	156	22	53	61	0	136	7	88	21	0	116	88	59	100	0	247	655
08:30 AM	97	62	4	0	163	20	55	58	0	133	6	105	23	2	136	83	36	103	0	222	654
08:45 AM	78	65	7	0	150	24	59	57	0	140	5	102	39	1	147	87	62	115	0	264	701
Total	344	263	20	0	627	86	202	237	0	525	32	373	105	4	514	367	212	416	0	995	2661
BREAK																					
03:00 PM	90	72	12	0	174	40	67	98	1	206	13	58	26	1	98	67	68	96	0	231	709
03:15 PM	86	72	12	0	170	28	79	81	1	189	15	85	26	0	126	80	66	115	1	262	747
03:30 PM	95	84	10	0	189	21	68	82	3	174	5	84	34	0	123	90	71	133	0	294	780
03:45 PM	92	81	20	0	193	25	61	82	0	168	19	72	39	6	136	74	64	104	0	242	739
Total	363	309	54	0	726	114	275	343	5	737	52	299	125	7	483	311	269	448	1	1029	2975
04:00 PM	90	89	17	0	196	38	73	92	1	204	10	67	31	0	108	75	78	96	1	250	758
04:15 PM	94	67	12	0	173	40	67	84	0	191	13	71	27	0	111	77	81	100	0	258	733
04:30 PM	77	79	11	0	167	36	58	84	0	178	22	70	20	0	112	56	75	103	0	234	691
04:45 PM	114	86	13	0	213	31	49	77	1	158	13	78	20	0	111	66	82	114	0	262	744
Total	375	321	53	0	749	145	247	337	2	731	58	286	98	0	442	274	316	413	1	1004	2926
05:00 PM	68	73	15	0	156	42	76	109	0	227	16	95	30	0	141	69	82	106	0	257	781
05:15 PM	102	90	11	0	203	36	60	67	0	163	10	97	26	0	133	83	76	106	0	265	764
05:30 PM	89	73	7	0	169	35	69	76	0	180	12	87	39	0	138	80	64	98	0	242	729
05:45 PM	72	72	11	0	155	34	58	75	0	167	9	88	21	0	118	91	73	112	0	276	716
Total	331	308	44	0	683	147	263	327	0	737	47	367	116	0	530	323	295	422	0	1040	2990
06:00 PM	78	88	7	1	174	41	52	67	0	160	6	81	22	1	110	86	55	83	0	224	668
06:15 PM	81	75	7	0	163	35	50	75	1	161	9	84	22	0	115	83	86	93	0	262	701
Grand Total	1883	1578	206	1	3668	625	1282	1575	8	3490	233	1764	577	12	2586	1718	1400	2172	2	5292	15036
Apprch %	51.3	43	5.6	0		17.9	36.7	45.1	0.2		9	68.2	22.3	0.5		32.5	26.5	41	0		
Total %	12.5	10.5	1.4	0	24.4	4.2	8.5	10.5	0.1	23.2	1.5	11.7	3.8	0.1	17.2	11.4	9.3	14.4	0	35.2	
Cars	1835	1504	194	1	3534	604	1211	1444	8	3267	212	1690	553	12	2467	1587	1340	2106	2	5035	14303
% Cars	97.5	95.3	94.2	100	96.3	96.6	94.5	91.7	100	93.6	91	95.8	95.8	100	95.4	92.4	95.7	97	100	95.1	95.1
Trucks	29	37	6	0	72	7	35	115	0	157	10	42	9	0	61	105	26	41	0	172	462
% Trucks	1.5	2.3	2.9	0	2	1.1	2.7	7.3	0	4.5	4.3	2.4	1.6	0	2.4	6.1	1.9	1.9	0	3.3	3.1
Buses	19	37	6	0	62	14	36	16	0	66	11	32	15	0	58	26	34	25	0	85	271
% Buses	1	2.3	2.9	0	1.7	2.2	2.8	1	0	1.9	4.7	1.8	2.6	0	2.2	1.5	2.4	1.2	0	1.6	1.8

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Lafayette Avenue (NY 59) and Airmont Road (CR 89)
Site Code : 00000000
Start Date : 6/15/2022

	Lafayette Avenue Eastbound					Lafayette Avenue Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	86	63	3	0	152	8	53	60	0	121	12	67	**30**	0	109	80	49	87	0	216	598
08:00 AM	90	63	**5**	0	158	20	35	**61**	0	116	**14**	78	22	1	115	**109**	55	98	0	**262**	651
08:15 AM	79	**73**	4	0	156	**22**	53	61	0	**136**	7	88	21	0	116	88	**59**	100	0	247	**655**
08:30 AM	**97**	62	4	0	**163**	20	**55**	58	0	133	6	**105**	23	**2**	**136**	83	36	**103**	0	222	654
Total Volume	352	261	16	0	629	70	196	240	0	506	39	338	96	3	476	360	199	388	0	947	2558
% App. Total	56	41.5	2.5	0		13.8	38.7	47.4	0		8.2	71	20.2	0.6		38	21	41	0		
PHF	.907	.894	.800	.000	.965	.795	.891	.984	.000	.930	.696	.805	.800	.375	.875	.826	.843	.942	.000	.904	.976
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	86	72	12	0	170	28	**79**	81	1	189	15	**85**	26	0	126	80	66	115	**1**	262	747
03:30 PM	**95**	84	10	0	189	21	68	82	**3**	174	5	84	34	0	123	**90**	71	**133**	0	**294**	**780**
03:45 PM	92	81	**20**	0	193	25	61	82	0	168	**19**	72	**39**	**6**	**136**	74	64	104	0	242	739
04:00 PM	90	**89**	17	0	**196**	**38**	73	**92**	1	**204**	10	67	31	0	108	75	**78**	96	1	250	758
Total Volume	363	326	59	0	748	112	281	337	5	735	49	308	130	6	493	319	279	448	2	1048	3024
% App. Total	48.5	43.6	7.9	0		15.2	38.2	45.9	0.7		9.9	62.5	26.4	1.2		30.4	26.6	42.7	0.2		
PHF	.955	.916	.738	.000	.954	.737	.889	.916	.417	.901	.645	.906	.833	.250	.906	.886	.894	.842	.500	.891	.969

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: I-297 Eastbound Ramps
N/S : Airmont Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Airmont Road (CR 89) and I-287 Eastbound Ramps
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	I-287 Eastbound Ramp Eastbound					I-287 Eastbound Ramp Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	66	0	70	0	136	0	0	0	0	0	0	102	120	0	222	47	90	0	0	137	495
07:15 AM	65	0	61	0	126	0	0	0	0	0	0	76	121	0	197	52	131	0	0	183	506
07:30 AM	50	3	107	0	160	0	0	0	0	0	0	85	131	0	216	61	141	0	0	202	578
07:45 AM	87	1	88	0	176	0	0	0	0	0	0	102	125	0	227	81	173	0	0	254	657
Total	268	4	326	0	598	0	0	0	0	0	0	365	497	0	862	241	535	0	0	776	2236
08:00 AM	70	1	96	0	167	0	0	0	0	0	0	124	143	0	267	81	163	0	0	244	678
08:15 AM	65	1	87	0	153	0	0	0	0	0	0	106	138	0	244	85	188	0	0	273	670
08:30 AM	60	2	78	0	140	0	0	0	0	0	0	106	172	0	278	84	177	0	0	261	679
08:45 AM	70	0	81	0	151	0	0	0	0	0	0	117	148	0	265	68	195	0	0	263	679
Total	265	4	342	0	611	0	0	0	0	0	0	453	601	0	1054	318	723	0	0	1041	2706
BREAK																					
03:00 PM	57	2	58	0	117	0	0	0	0	0	0	151	146	0	297	94	197	0	0	291	705
03:15 PM	66	0	62	0	128	0	0	0	0	0	0	126	153	0	279	101	225	0	0	326	733
03:30 PM	53	1	64	0	118	0	0	0	2	2	0	144	148	0	292	92	235	0	0	327	739
03:45 PM	61	2	54	0	117	0	0	0	1	1	0	142	125	0	267	86	246	0	0	332	717
Total	237	5	238	0	480	0	0	0	3	3	0	563	572	0	1135	373	903	0	0	1276	2894
04:00 PM	49	0	63	0	112	0	0	0	1	1	0	135	158	0	293	89	240	0	0	329	735
04:15 PM	62	0	43	0	105	0	0	0	0	0	0	121	151	0	272	78	209	0	0	287	664
04:30 PM	60	0	52	0	112	0	0	0	0	0	0	116	147	0	263	81	203	0	0	284	659
04:45 PM	76	0	53	0	129	0	0	0	1	1	0	126	165	0	291	93	216	0	0	309	730
Total	247	0	211	0	458	0	0	0	2	2	0	498	621	0	1119	341	868	0	0	1209	2788
05:00 PM	52	1	56	0	109	0	0	0	0	0	0	143	181	0	324	103	224	0	0	327	760
05:15 PM	70	0	66	0	136	0	0	0	0	0	0	125	162	0	287	120	225	0	0	345	768
05:30 PM	80	0	65	0	145	0	0	0	0	0	0	98	155	0	253	84	198	0	0	282	680
05:45 PM	83	0	78	0	161	0	0	0	0	0	0	101	143	0	244	75	198	0	0	273	678
Total	285	1	265	0	551	0	0	0	0	0	0	467	641	0	1108	382	845	0	0	1227	2886
06:00 PM	66	1	65	0	132	0	0	0	0	0	0	106	150	0	256	87	192	0	0	279	667
06:15 PM	70	0	80	0	150	0	0	0	0	0	0	105	137	0	242	93	200	0	0	293	685
Grand Total	1438	15	1527	0	2980	0	0	0	5	5	0	2557	3219	0	5776	1835	4266	0	0	6101	14862
Apprch %	48.3	0.5	51.2	0		0	0	0	100		0	44.3	55.7	0		30.1	69.9	0	0		
Total %	9.7	0.1	10.3	0	20.1	0	0	0	0	0	0	17.2	21.7	0	38.9	12.3	28.7	0	0	41.1	
Cars	1329	4	1331	0	2664	0	0	0	5	5	0	2318	3106	0	5424	1789	4120	0	0	5909	14002
% Cars	92.4	26.7	87.2	0	89.4	0	0	0	100	100	0	90.7	96.5	0	93.9	97.5	96.6	0	0	96.9	94.2
Trucks	82	11	167	0	260	0	0	0	0	0	0	199	91	0	290	33	97	0	0	130	680
% Trucks	5.7	73.3	10.9	0	8.7	0	0	0	0	0	0	7.8	2.8	0	5	1.8	2.3	0	0	2.1	4.6
Buses	27	0	29	0	56	0	0	0	0	0	0	40	22	0	62	13	49	0	0	62	180
% Buses	1.9	0	1.9	0	1.9	0	0	0	0	0	0	1.6	0.7	0	1.1	0.7	1.1	0	0	1	1.2

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Airmont Road (CR 89) and I-287 Eastbound Ramps
Site Code : 00000000
Start Date : 6/15/2022
Page No : 2

	I-287 Eastbound Ramp Eastbound					I-287 Eastbound Ramp Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	87	1	88	0	176	0	0	0	0	0	0	102	125	0	227	81	173	0	0	254	657
08:00 AM	70	1	96	0	167	0	0	0	0	0	0	124	143	0	267	81	163	0	0	244	678
08:15 AM	65	1	87	0	153	0	0	0	0	0	0	106	138	0	244	85	188	0	0	273	670
08:30 AM	60	2	78	0	140	0	0	0	0	0	0	106	172	0	278	84	177	0	0	261	679
Total Volume	282	5	349	0	636	0	0	0	0	0	0	438	578	0	1016	331	701	0	0	1032	2684
% App. Total	44.3	0.8	54.9	0		0	0	0	0		0	43.1	56.9	0		32.1	67.9	0	0		
PHF	.810	.625	.909	.000	.903	.000	.000	.000	.000	.000	.000	.883	.840	.000	.914	.974	.932	.000	.000	.945	.988
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	66	0	62	0	128	0	0	0	0	0	0	126	153	0	279	101	225	0	0	326	733
03:30 PM	53	1	64	0	118	0	0	0	2	2	0	144	148	0	292	92	235	0	0	327	739
03:45 PM	61	2	54	0	117	0	0	0	1	1	0	142	125	0	267	86	246	0	0	332	717
04:00 PM	49	0	63	0	112	0	0	0	1	1	0	135	158	0	293	89	240	0	0	329	735
Total Volume	229	3	243	0	475	0	0	0	4	4	0	547	584	0	1131	368	946	0	0	1314	2924
% App. Total	48.2	0.6	51.2	0		0	0	0	100		0	48.4	51.6	0		28	72	0	0		
PHF	.867	.375	.949	.000	.928	.000	.000	.000	.500	.500	.000	.950	.924	.000	.965	.911	.961	.000	.000	.989	.989

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: I-297 Westbound Ramps
N/S : Airmont Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Airmont Road (CR 89) and I-287 Westbound Ramps
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	I-287 Westbound Ramp Eastbound					I-287 Westbound Ramp Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	112	1	76	0	189	61	130	0	0	191	0	127	75	0	202	582
07:15 AM	0	0	0	0	0	143	0	87	0	230	53	120	0	0	173	0	132	82	0	214	617
07:30 AM	0	0	0	0	0	128	0	82	0	210	54	119	0	0	173	0	134	82	0	216	599
07:45 AM	0	0	0	0	0	150	0	110	0	260	54	124	0	0	178	0	118	99	0	217	655
Total	0	0	0	0	0	533	1	355	0	889	222	493	0	0	715	0	511	338	0	849	2453
08:00 AM	0	0	0	0	0	136	1	102	0	239	38	133	0	0	171	0	165	65	0	230	640
08:15 AM	0	0	0	0	0	111	0	75	0	186	56	124	0	0	180	0	141	80	0	221	587
08:30 AM	0	0	0	0	0	98	1	82	0	181	56	99	0	0	155	0	133	69	0	202	538
08:45 AM	0	0	0	0	0	96	0	56	0	152	51	96	0	0	147	0	146	86	0	232	531
Total	0	0	0	0	0	441	2	315	0	758	201	452	0	0	653	0	585	300	0	885	2296
BREAK																					
09:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
09:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
BREAK																					
03:00 PM	0	0	0	0	0	136	0	82	0	218	75	121	0	0	196	0	151	108	0	259	673
03:15 PM	0	0	0	0	0	150	0	82	0	232	78	121	0	0	199	0	179	101	0	280	711
03:30 PM	0	0	0	0	0	155	0	107	3	265	75	128	0	2	205	0	171	87	0	258	728
03:45 PM	0	0	0	2	2	175	0	99	0	274	66	136	0	0	202	0	155	76	0	231	709
Total	0	0	0	2	2	616	0	370	3	989	294	506	0	2	802	0	656	372	0	1028	2821
04:00 PM	0	0	0	1	1	180	0	93	0	273	82	100	0	0	182	0	155	85	0	240	696
04:15 PM	0	0	0	0	0	140	0	87	0	227	62	123	0	0	185	0	149	70	0	219	631
04:30 PM	0	0	0	0	0	142	0	93	0	235	60	125	0	0	185	0	138	95	0	233	653
04:45 PM	0	0	0	1	1	155	0	78	0	233	80	117	0	0	197	0	154	93	0	247	678
Total	0	0	0	2	2	617	0	351	0	968	284	465	0	0	749	0	596	343	0	939	2658
05:00 PM	0	0	0	1	1	152	0	74	0	226	68	116	0	0	184	0	180	106	0	286	697
05:15 PM	0	0	0	0	0	153	0	112	0	265	71	130	0	0	201	0	189	105	0	294	760
05:30 PM	0	0	0	0	0	149	0	111	0	260	57	132	0	0	189	0	132	96	0	228	677
05:45 PM	0	0	0	0	0	152	0	130	0	282	44	132	0	0	176	0	126	75	0	201	659
Total	0	0	0	1	1	606	0	427	0	1033	240	510	0	0	750	0	627	382	0	1009	2793
06:00 PM	0	0	0	0	0	131	0	99	0	230	46	127	0	0	173	0	137	78	0	215	618
06:15 PM	0	0	0	0	0	144	0	79	0	223	48	124	0	0	172	0	153	84	0	237	632
Grand Total	0	0	0	6	6	3088	3	1996	4	5091	1335	2677	0	2	4014	0	3265	1897	0	5162	14273
Apprch %	0	0	0	100		60.7	0.1	39.2	0.1		33.3	66.7	0	0		0	63.3	36.7	0		
Total %	0	0	0	0	0	21.6	0	14	0	35.7	9.4	18.8	0	0	28.1	0	22.9	13.3	0	36.2	
Cars	0	0	0	6	6	2982	3	1940	4	4929	1140	2520	0	2	3662	0	3163	1764	0	4927	13524
% Cars	0	0	0	100	100	96.6	100	97.2	100	96.8	85.4	94.1	0	100	91.2	0	96.9	93	0	95.4	94.8
Trucks	0	0	0	0	0	86	0	35	0	121	177	119	0	0	296	0	69	90	0	159	576
% Trucks	0	0	0	0	0	2.8	0	1.8	0	2.4	13.3	4.4	0	0	7.4	0	2.1	4.7	0	3.1	4
Buses	0	0	0	0	0	20	0	21	0	41	18	38	0	0	56	0	33	43	0	76	173
% Buses	0	0	0	0	0	0.6	0	1.1	0	0.8	1.3	1.4	0	0	1.4	0	1	2.3	0	1.5	1.2

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Airmont Road (CR 89) and I-287 Westbound Ramps
Site Code : 00000000
Start Date : 6/15/2022
Page No : 2

	I-287 Westbound Ramp Eastbound					I-287 Westbound Ramp Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	**150**	0	**110**	0	**260**	54	124	0	0	178	0	118	**99**	0	217	**655**
08:00 AM	0	0	0	0	0	136	**1**	102	0	239	38	**133**	0	0	171	0	**165**	65	0	**230**	640
08:15 AM	0	0	0	0	0	111	0	75	0	186	**56**	124	0	0	**180**	0	141	80	0	221	587
08:30 AM	0	0	0	0	0	98	1	82	0	181	56	99	0	0	155	0	133	69	0	202	538
Total Volume	0	0	0	0	0	495	2	369	0	866	204	480	0	0	684	0	557	313	0	870	2420
% App. Total	0	0	0	0		57.2	0.2	42.6	0		29.8	70.2	0	0		0	64	36	0		
PHF	.000	.000	.000	.000	.000	.825	.500	.839	.000	.833	.911	.902	.000	.000	.950	.000	.844	.790	.000	.946	.924
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	0	0	0	0	0	150	0	82	0	232	78	121	0	0	199	0	**179**	**101**	0	**280**	711
03:30 PM	0	0	0	0	0	155	0	**107**	**3**	265	75	128	0	**2**	**205**	0	171	87	0	258	**728**
03:45 PM	0	0	0	**2**	**2**	175	0	99	0	**274**	66	**136**	0	0	202	0	155	76	0	231	709
04:00 PM	0	0	0	1	1	**180**	0	93	0	273	**82**	100	0	0	182	0	155	85	0	240	696
Total Volume	0	0	0	3	3	660	0	381	3	1044	301	485	0	2	788	0	660	349	0	1009	2844
% App. Total	0	0	0	100		63.2	0	36.5	0.3		38.2	61.5	0	0.3		0	65.4	34.6	0		
PHF	.000	.000	.000	.375	.375	.917	.000	.890	.250	.953	.918	.892	.000	.250	.961	.000	.922	.864	.000	.901	.977

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: North DeBaun
N/S : Airmont Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Airmont Road (CR 89) and North DeBaun AM
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	North DeBaun Eastbound					North DeBaun Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	17	0	5	0	22	0	0	1	0	1	10	183	1	0	194	0	146	0	0	146	363
07:15 AM	17	0	7	0	24	3	1	2	0	6	8	173	2	0	183	2	172	0	0	174	387
07:30 AM	11	1	9	0	21	1	1	2	0	4	4	196	2	0	202	6	204	1	0	211	438
07:45 AM	14	0	4	0	18	1	0	3	0	4	5	215	2	0	222	7	243	0	0	250	494
Total	59	1	25	0	85	5	2	8	0	15	27	767	7	0	801	15	765	1	0	781	1682
08:00 AM	11	0	5	0	16	5	0	9	0	14	7	231	2	0	240	4	246	0	0	250	520
08:15 AM	19	0	8	0	27	6	0	1	0	7	11	317	1	0	329	2	230	2	0	234	597
08:30 AM	11	0	10	0	21	2	0	4	1	7	8	264	4	0	276	5	238	2	0	245	549
08:45 AM	10	0	9	0	19	3	1	4	0	8	5	241	5	0	251	3	256	1	0	260	538
Total	51	0	32	0	83	16	1	18	1	36	31	1053	12	0	1096	14	970	5	0	989	2204
Grand Total	110	1	57	0	168	21	3	26	1	51	58	1820	19	0	1897	29	1735	6	0	1770	3886
Apprch %	65.5	0.6	33.9	0		41.2	5.9	51	2		3.1	95.9	1	0		1.6	98	0.3	0		
Total %	2.8	0	1.5	0	4.3	0.5	0.1	0.7	0	1.3	1.5	46.8	0.5	0	48.8	0.7	44.6	0.2	0	45.5	
Cars	107	1	47	0	155	21	2	23	1	47	52	1715	18	0	1785	27	1601	5	0	1633	3620
% Cars	97.3	100	82.5	0	92.3	100	66.7	88.5	100	92.2	89.7	94.2	94.7	0	94.1	93.1	92.3	83.3	0	92.3	93.2
Trucks	3	0	6	0	9	0	1	2	0	3	2	79	1	0	82	2	89	1	0	92	186
% Trucks	2.7	0	10.5	0	5.4	0	33.3	7.7	0	5.9	3.4	4.3	5.3	0	4.3	6.9	5.1	16.7	0	5.2	4.8
Buses	0	0	4	0	4	0	0	1	0	1	4	26	0	0	30	0	45	0	0	45	80
% Buses	0	0	7	0	2.4	0	0	3.8	0	2	6.9	1.4	0	0	1.6	0	2.6	0	0	2.5	2.1

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Airmont Road (CR 89) and North DeBaun AM
Site Code : 00000000
Start Date : 6/15/2022
Page No : 2

	North DeBaun Eastbound					North DeBaun Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	14	0	4	0	18	1	0	3	0	4	5	215	2	0	222	**7**	243	0	0	**250**	494
08:00 AM	11	0	5	0	16	5	0	**9**	0	**14**	7	231	2	0	240	4	**246**	0	0	250	520
08:15 AM	**19**	0	8	0	**27**	**6**	0	1	0	7	**11**	**317**	1	0	**329**	2	230	**2**	0	234	**597**
08:30 AM	11	0	**10**	0	21	2	0	4	**1**	7	8	264	**4**	0	276	5	238	2	0	245	549
Total Volume	55	0	27	0	82	14	0	17	1	32	31	1027	9	0	1067	18	957	4	0	979	2160
% App. Total	67.1	0	32.9	0		43.8	0	53.1	3.1		2.9	96.3	0.8	0		1.8	97.8	0.4	0		
PHF	.724	.000	.675	.000	.759	.583	.000	.472	.250	.571	.705	.810	.563	.000	.811	.643	.973	.500	.000	.979	.905

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: North DeBaun
N/S : Airmont Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Airmont Road (CR 89) and North DeBaun PM
Site Code : 00000000
Start Date : 6/16/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	North DeBaun Eastbound					North DeBaun Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
03:00 PM	10	0	5	1	16	5	0	4	0	9	4	226	8	0	238	2	236	4	0	242	505
03:15 PM	12	0	6	0	18	7	0	4	0	11	6	231	6	0	243	6	261	1	0	268	540
03:30 PM	17	0	5	1	23	8	0	9	0	17	10	262	13	2	287	9	305	2	0	316	643
03:45 PM	13	0	5	0	18	4	0	4	1	9	8	253	4	0	265	5	299	5	0	309	601
Total	52	0	21	2	75	24	0	21	1	46	28	972	31	2	1033	22	1101	12	0	1135	2289
04:00 PM	13	0	10	1	24	4	0	7	1	12	8	264	5	1	278	6	269	2	0	277	591
04:15 PM	20	0	5	1	26	4	1	7	0	12	9	260	8	1	278	7	244	3	0	254	570
04:30 PM	15	0	4	1	20	4	0	4	1	9	8	232	8	1	249	7	245	0	0	252	530
04:45 PM	20	0	5	0	25	11	0	9	0	20	10	235	8	1	254	3	266	0	0	269	568
Total	68	0	24	3	95	23	1	27	2	53	35	991	29	4	1059	23	1024	5	0	1052	2259
05:00 PM	16	0	5	1	22	5	0	13	0	18	5	305	8	0	318	13	248	2	0	263	621
05:15 PM	12	1	4	0	17	5	0	14	1	20	10	286	4	0	300	8	256	6	2	272	609
05:30 PM	17	0	8	0	25	5	0	7	0	12	4	288	4	0	296	4	239	1	0	244	577
05:45 PM	8	1	2	1	12	3	1	9	1	14	11	267	5	1	284	7	248	1	0	256	566
Total	53	2	19	2	76	18	1	43	2	64	30	1146	21	1	1198	32	991	10	2	1035	2373
06:00 PM	5	0	6	2	13	3	0	5	0	8	7	236	1	1	245	2	233	0	0	235	501
06:15 PM	13	1	5	0	19	3	1	4	0	8	4	195	5	0	204	7	257	3	0	267	498
Grand Total	191	3	75	9	278	71	3	100	5	179	104	3540	87	8	3739	86	3606	30	2	3724	7920
Apprch %	68.7	1.1	27	3.2		39.7	1.7	55.9	2.8		2.8	94.7	2.3	0.2		2.3	96.8	0.8	0.1		
Total %	2.4	0	0.9	0.1	3.5	0.9	0	1.3	0.1	2.3	1.3	44.7	1.1	0.1	47.2	1.1	45.5	0.4	0	47	
Cars	182	3	68	9	262	71	3	99	5	178	94	3415	87	8	3604	84	3499	30	2	3615	7659
% Cars	95.3	100	90.7	100	94.2	100	100	99	100	99.4	90.4	96.5	100	100	96.4	97.7	97	100	100	97.1	96.7
Trucks	8	0	1	0	9	0	0	0	0	0	4	86	0	0	90	1	69	0	0	70	169
% Trucks	4.2	0	1.3	0	3.2	0	0	0	0	0	3.8	2.4	0	0	2.4	1.2	1.9	0	0	1.9	2.1
Buses	1	0	6	0	7	0	0	1	0	1	6	39	0	0	45	1	38	0	0	39	92
% Buses	0.5	0	8	0	2.5	0	0	1	0	0.6	5.8	1.1	0	0	1.2	1.2	1.1	0	0	1	1.2

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Airmont Road (CR 89) and North DeBaun PM
Site Code : 00000000
Start Date : 6/16/2022
Page No : 2

	North DeBaun Eastbound					North DeBaun Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	12	0	6	0	18	7	0	4	0	11	6	231	6	0	243	6	261	1	0	268	540
03:30 PM	**17**	0	5	**1**	23	**8**	0	**9**	0	**17**	**10**	262	**13**	**2**	**287**	**9**	**305**	2	0	**316**	**643**
03:45 PM	13	0	5	0	18	4	0	4	**1**	9	8	253	4	0	265	5	299	**5**	0	309	601
04:00 PM	13	0	**10**	1	**24**	4	0	7	1	12	8	**264**	5	1	278	6	269	2	0	277	591
Total Volume	55	0	26	2	83	23	0	24	2	49	32	1010	28	3	1073	26	1134	10	0	1170	2375
% App. Total	66.3	0	31.3	2.4		46.9	0	49	4.1		3	94.1	2.6	0.3		2.2	96.9	0.9	0		
PHF	.809	.000	.650	.500	.865	.719	.000	.667	.500	.721	.800	.956	.538	.375	.935	.722	.930	.500	.000	.926	.923

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W:Montebello Road/Rella Road
N/S : North Airmont Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Montebello Road (CR 64)-Rella Road & North Airmont Road
Site Code : 00000000
Start Date : 7/27/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Montebello Road Eastbound					Rella Road Westbound					North Airmont Road Northbound					North Airmont Road Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	5	1	31	0	37	1	1	2	0	4	11	58	5	0	74	2	65	10	0	77	192
07:15 AM	10	3	50	0	63	1	0	1	1	3	14	76	8	0	98	0	100	13	0	113	277
07:30 AM	8	2	48	0	58	3	0	0	1	4	22	87	10	0	119	0	69	5	0	74	255
07:45 AM	16	2	61	0	79	0	0	0	0	0	32	103	9	0	144	5	122	14	0	141	364
Total	39	8	190	0	237	5	1	3	2	11	79	324	32	0	435	7	356	42	0	405	1088
08:00 AM	12	3	57	0	72	1	0	1	0	2	44	107	10	0	161	1	107	17	0	125	360
08:15 AM	21	3	64	0	88	1	1	0	0	2	31	94	12	0	137	0	112	11	0	123	350
08:30 AM	23	3	80	0	106	1	0	3	0	4	32	104	14	0	150	7	136	12	0	155	415
08:45 AM	21	6	80	0	107	2	2	4	0	8	41	125	24	0	190	17	154	22	0	193	498
Total	77	15	281	0	373	5	3	8	0	16	148	430	60	0	638	25	509	62	0	596	1623
BREAK																					
03:00 PM	19	3	42	0	64	11	0	7	0	18	41	136	5	0	182	9	127	18	0	154	418
03:15 PM	20	0	44	0	64	14	3	11	0	28	41	164	7	0	212	3	164	16	0	183	487
03:30 PM	16	2	37	0	55	7	5	8	0	20	57	149	8	0	214	5	187	28	0	220	509
03:45 PM	18	0	46	0	64	10	5	9	0	24	60	140	12	0	212	8	176	21	0	205	505
Total	73	5	169	0	247	42	13	35	0	90	199	589	32	0	820	25	654	83	0	762	1919
04:00 PM	25	1	45	0	71	21	4	13	0	38	55	121	3	0	179	6	129	15	0	150	438
04:15 PM	19	2	68	0	89	12	4	6	0	22	52	107	7	0	166	5	148	8	1	162	439
04:30 PM	15	0	69	0	84	17	0	12	0	29	47	143	7	0	197	4	159	18	0	181	491
04:45 PM	21	1	65	0	87	10	3	8	0	21	73	146	8	0	227	9	170	21	0	200	535
Total	80	4	247	0	331	60	11	39	0	110	227	517	25	0	769	24	606	62	1	693	1903
05:00 PM	16	1	67	0	84	34	9	21	0	64	50	150	5	0	205	4	166	25	0	195	548
05:15 PM	17	0	52	0	69	16	0	10	0	26	68	136	7	0	211	1	158	27	0	186	492
05:30 PM	8	1	51	0	60	19	2	9	0	30	70	144	4	0	218	3	150	16	0	169	477
05:45 PM	7	4	46	0	57	8	0	9	0	17	73	156	3	0	232	1	133	15	0	149	455
Total	48	6	216	0	270	77	11	49	0	137	261	586	19	0	866	9	607	83	0	699	1972
06:00 PM	12	1	53	0	66	10	0	12	0	22	58	168	2	0	228	3	151	11	0	165	481
06:15 PM	11	0	47	0	58	17	2	19	0	38	61	151	3	0	215	6	135	13	0	154	465
Grand Total	340	39	1203	0	1582	216	41	165	2	424	1033	2765	173	0	3971	99	3018	356	1	3474	9451
Apprch %	21.5	2.5	76	0		50.9	9.7	38.9	0.5		26	69.6	4.4	0		2.8	86.9	10.2	0		
Total %	3.6	0.4	12.7	0	16.7	2.3	0.4	1.7	0	4.5	10.9	29.3	1.8	0	42	1	31.9	3.8	0	36.8	
Cars	328	38	1182	0	1548	213	39	162	2	416	1011	2597	169	0	3777	94	2853	339	1	3287	9028
% Cars	96.5	97.4	98.3	0	97.9	98.6	95.1	98.2	100	98.1	97.9	93.9	97.7	0	95.1	94.9	94.5	95.2	100	94.6	95.5
Trucks	6	1	15	0	22	1	1	2	0	4	16	125	2	0	143	3	126	12	0	141	310
% Trucks	1.8	2.6	1.2	0	1.4	0.5	2.4	1.2	0	0.9	1.5	4.5	1.2	0	3.6	3	4.2	3.4	0	4.1	3.3
Buses	6	0	6	0	12	2	1	1	0	4	6	43	2	0	51	2	39	5	0	46	113
% Buses	1.8	0	0.5	0	0.8	0.9	2.4	0.6	0	0.9	0.6	1.6	1.2	0	1.3	2	1.3	1.4	0	1.3	1.2

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Montebello Road (CR 64)-Rella Road & North Airmont Road
Site Code : 00000000
Start Date : 7/27/2022
Page No : 2

	Montebello Road Eastbound					Rella Road Westbound					North Airmont Road Northbound					North Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	16	2	61	0	79	0	0	0	0	0	32	103	9	0	144	5	122	14	0	141	364
08:00 AM	12	**3**	57	0	72	**1**	0	1	0	2	**44**	**107**	10	0	**161**	1	107	**17**	0	125	360
08:15 AM	21	3	64	0	88	1	**1**	0	0	2	31	94	12	0	137	0	112	11	0	123	350
08:30 AM	**23**	3	**80**	0	**106**	1	0	**3**	0	**4**	32	104	**14**	0	150	**7**	**136**	12	0	**155**	**415**
Total Volume	72	11	262	0	345	3	1	4	0	8	139	408	45	0	592	13	477	54	0	544	1489
% App. Total	20.9	3.2	75.9	0		37.5	12.5	50	0		23.5	68.9	7.6	0		2.4	87.7	9.9	0		
PHF	.783	.917	.819	.000	.814	.750	.250	.333	.000	.500	.790	.953	.804	.000	.919	.464	.877	.794	.000	.877	.897
Cars	71	10	256	0	337	3	0	3	0	6	132	369	45	0	546	12	438	48	0	498	1387
% Cars	98.6	90.9	97.7	0	97.7	100	0	75.0	0	75.0	95.0	90.4	100	0	92.2	92.3	91.8	88.9	0	91.5	93.1
Trucks	1	1	3	0	5	0	1	1	0	2	7	29	0	0	36	1	32	4	0	37	80
% Trucks	1.4	9.1	1.1	0	1.4	0	100	25.0	0	25.0	5.0	7.1	0	0	6.1	7.7	6.7	7.4	0	6.8	5.4
Buses	0	0	3	0	3	0	0	0	0	0	0	10	0	0	10	0	7	2	0	9	22
% Buses	0	0	1.1	0	0.9	0	0	0	0	0	0	2.5	0	0	1.7	0	1.5	3.7	0	1.7	1.5
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	20	0	44	0	64	14	3	11	0	28	41	**164**	7	0	212	3	164	16	0	183	487
03:30 PM	16	**2**	37	0	55	7	**5**	8	0	20	57	149	8	0	**214**	5	**187**	**28**	0	**220**	**509**
03:45 PM	18	0	**46**	0	64	10	5	9	0	24	**60**	140	**12**	0	212	**8**	176	21	0	205	505
04:00 PM	**25**	1	45	0	**71**	**21**	4	**13**	0	**38**	55	121	3	0	179	6	129	15	0	150	438
Total Volume	79	3	172	0	254	52	17	41	0	110	213	574	30	0	817	22	656	80	0	758	1939
% App. Total	31.1	1.2	67.7	0		47.3	15.5	37.3	0		26.1	70.3	3.7	0		2.9	86.5	10.6	0		
PHF	.790	.375	.935	.000	.894	.619	.850	.788	.000	.724	.888	.875	.625	.000	.954	.688	.877	.714	.000	.861	.952
Cars	74	3	169	0	246	51	16	41	0	108	211	541	30	0	782	20	617	78	0	715	1851
% Cars	93.7	100	98.3	0	96.9	98.1	94.1	100	0	98.2	99.1	94.3	100	0	95.7	90.9	94.1	97.5	0	94.3	95.5
Trucks	2	0	2	0	4	0	0	0	0	0	1	17	0	0	18	1	32	1	0	34	56
% Trucks	2.5	0	1.2	0	1.6	0	0	0	0	0	0.5	3.0	0	0	2.2	4.5	4.9	1.3	0	4.5	2.9
Buses	3	0	1	0	4	1	1	0	0	2	1	16	0	0	17	1	7	1	0	9	32
% Buses	3.8	0	0.6	0	1.6	1.9	5.9	0	0	1.8	0.5	2.8	0	0	2.1	4.5	1.1	1.3	0	1.2	1.7

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Executive Blvd/HQRC Driveway
N/S: N Airmont Road
Town/County: Montebello/Rockland
Job #: 3709-99-004T

File Name : N Airmont Road & Executive Boulevard - MTM
Site Code : 00000000
Start Date : 5/24/2023
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Executive Blvd Eastbound						HQRC Management Driveway Westbound						N Airmont Road Northbound						N Airmont Road Southbound						
Start Time	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
07:00 AM	1	0	5	0	1	7	0	0	1	0	0	1	11	172	2	0	0	185	0	133	4	0	0	137	330
07:15 AM	2	0	2	0	1	5	0	0	0	0	0	0	15	177	1	0	0	193	0	146	4	0	0	150	348
07:30 AM	1	0	3	0	0	4	0	0	0	0	0	0	9	178	4	0	0	191	1	188	4	0	0	193	388
07:45 AM	3	0	1	0	0	4	1	0	0	0	0	1	25	198	6	0	0	229	1	207	4	0	0	212	446
Total	7	0	11	0	2	20	1	0	1	0	0	2	60	725	13	0	0	798	2	674	16	0	0	692	1512
08:00 AM	4	0	11	0	0	15	0	0	0	0	0	0	22	173	5	0	0	200	0	184	9	0	0	193	408
08:15 AM	4	0	3	0	0	7	0	0	0	0	1	1	35	203	2	0	0	240	0	191	7	0	0	198	446
08:30 AM	7	0	5	0	0	12	2	0	0	0	0	2	40	206	6	0	0	252	0	215	14	0	0	229	495
08:45 AM	4	0	7	0	0	11	1	0	0	0	0	1	36	225	10	0	0	271	0	263	10	1	0	274	557
Total	19	0	26	0	0	45	3	0	0	0	1	4	133	807	23	0	0	963	0	853	40	1	0	894	1906
*** BREAK ***																									
03:00 PM	12	0	18	2	0	32	7	0	0	0	0	7	13	193	2	0	0	208	1	265	6	0	0	272	519
03:15 PM	9	0	7	0	1	17	4	0	2	0	1	7	10	190	4	0	0	204	2	252	11	0	0	265	493
03:30 PM	12	0	18	0	0	30	5	0	0	0	0	5	12	205	6	0	0	223	3	263	4	1	0	271	529
03:45 PM	8	0	11	0	0	19	4	0	1	0	0	5	12	216	7	0	0	235	0	214	9	0	0	223	482
Total	41	0	54	2	1	98	20	0	3	0	1	24	47	804	19	0	0	870	6	994	30	1	0	1031	2023
04:00 PM	9	0	22	0	0	31	2	0	1	0	0	3	14	203	1	0	0	218	0	274	7	0	0	281	533
04:15 PM	8	0	14	0	0	22	3	0	0	0	0	3	14	207	1	2	0	224	1	235	4	0	0	240	489
04:30 PM	9	0	29	0	0	38	9	0	3	0	0	12	13	207	1	1	0	222	1	238	6	0	0	245	517
04:45 PM	7	0	17	0	1	25	2	0	0	0	0	2	8	202	1	0	0	211	0	216	5	0	0	221	459
Total	33	0	82	0	1	116	16	0	4	0	0	20	49	819	4	3	0	875	2	963	22	0	0	987	1998
05:00 PM	26	1	50	1	0	78	10	0	1	0	0	11	22	224	2	0	0	248	1	222	9	0	0	232	569
05:15 PM	10	0	23	1	0	34	9	0	1	0	0	10	7	226	0	0	0	233	1	237	8	0	0	246	523
05:30 PM	10	0	13	0	0	23	11	0	0	0	0	11	9	247	0	0	0	256	0	227	1	0	0	228	518
05:45 PM	5	0	15	0	0	20	5	0	1	0	0	6	10	247	0	0	0	257	2	207	4	0	0	213	496
Total	51	1	101	2	0	155	35	0	3	0	0	38	48	944	2	0	0	994	4	893	22	0	0	919	2106
06:00 PM	5	0	14	0	0	19	2	0	2	0	0	4	9	244	2	0	0	255	1	202	8	0	0	211	489
06:15 PM	6	0	14	0	0	20	1	0	0	0	0	1	2	236	1	0	0	239	0	195	2	0	0	197	457
Grand Total	162	1	302	4	4	473	78	0	13	0	2	93	348	4579	64	3	0	4994	15	4774	140	2	0	4931	10491
Apprch %	34.2	0.2	63.8	0.8	0.8		83.9	0	14	0	2.2		7	91.7	1.3	0.1	0		0.3	96.8	2.8	0	0		
Total %	1.5	0	2.9	0	0	4.5	0.7	0	0.1	0	0	0.9	3.3	43.6	0.6	0	0	47.6	0.1	45.5	1.3	0	0	47	
Cars	153	1	299	4	4	461	78	0	13	0	2	93	343	4355	64	3	0	4765	15	4533	132	2	0	4682	10001
% Cars	94.4	100	99	100	100	97.5	100	0	100	0	100	100	98.6	95.1	100	100	0	95.4	100	95	94.3	100	0	95	95.3
Trucks	6	0	3	0	0	9	0	0	0	0	0	0	5	139	0	0	0	144	0	152	6	0	0	158	311
% Trucks	3.7	0	1	0	0	1.9	0	0	0	0	0	0	1.4	3	0	0	0	2.9	0	3.2	4.3	0	0	3.2	3
Buses	3	0	0	0	0	3	0	0	0	0	0	0	0	85	0	0	0	85	0	89	2	0	0	91	179
% Buses	1.9	0	0	0	0	0.6	0	0	0	0	0	0	0	1.9	0	0	0	1.7	0	1.9	1.4	0	0	1.8	1.7

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : N Airmont Road & Executive Boulevard - MTM
Site Code : 00000000
Start Date : 5/24/2023
Page No : 2

	Executive Blvd Eastbound						HQRC Management Driveway Westbound						N Airmont Road Northbound						N Airmont Road Southbound						
Start Time	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 07:45 AM																									
07:45 AM	3	0	1	0	0	4	1	0	0	0	0	1	25	198	6	0	0	229	1	207	4	0	0	212	446
08:00 AM	4	0	11	0	0	15	0	0	0	0	0	0	22	173	5	0	0	200	0	184	9	0	0	193	408
08:15 AM	4	0	3	0	0	7	0	0	0	0	1	1	35	203	2	0	0	240	0	191	7	0	0	198	446
08:30 AM	7	0	5	0	0	12	2	0	0	0	0	2	40	206	6	0	0	252	0	215	14	0	0	229	495
Total Volume	18	0	20	0	0	38	3	0	0	0	1	4	122	780	19	0	0	921	1	797	34	0	0	832	1795
% App. Total	47.4	0	52.6	0	0		75	0	0	0	25		13.2	84.7	2.1	0	0		0.1	95.8	4.1	0	0		
PHF	.643	.000	.455	.000	.000	.633	.375	.000	.000	.000	.250	.500	.763	.947	.792	.000	.000	.914	.250	.927	.607	.000	.000	.908	.907
Cars	17	0	18	0	0	35	3	0	0	0	1	4	122	724	19	0	0	865	1	740	32	0	0	773	1677
% Cars	94.4	0	90.0	0	0	92.1	100	0	0	0	100	100	100	92.8	100	0	0	93.9	100	92.8	94.1	0	0	92.9	93.4
Trucks	0	0	2	0	0	2	0	0	0	0	0	0	0	34	0	0	0	34	0	27	1	0	0	28	64
% Trucks	0	0	10.0	0	0	5.3	0	0	0	0	0	0	0	4.4	0	0	0	3.7	0	3.4	2.9	0	0	3.4	3.6
Buses	1	0	0	0	0	1	0	0	0	0	0	0	0	22	0	0	0	22	0	30	1	0	0	31	54
% Buses	5.6	0	0	0	0	2.6	0	0	0	0	0	0	0	2.8	0	0	0	2.4	0	3.8	2.9	0	0	3.7	3.0
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 03:15 PM																									
03:15 PM	9	0	7	0	1	17	4	0	2	0	1	7	10	190	4	0	0	204	2	252	11	0	0	265	493
03:30 PM	12	0	18	0	0	30	5	0	0	0	0	5	12	205	6	0	0	223	3	263	4	1	0	271	529
03:45 PM	8	0	11	0	0	19	4	0	1	0	0	5	12	216	7	0	0	235	0	214	9	0	0	223	482
04:00 PM	9	0	22	0	0	31	2	0	1	0	0	3	14	203	1	0	0	218	0	274	7	0	0	281	533
Total Volume	38	0	58	0	1	97	15	0	4	0	1	20	48	814	18	0	0	880	5	1003	31	1	0	1040	2037
% App. Total	39.2	0	59.8	0	1		75	0	20	0	5		5.5	92.5	2	0	0		0.5	96.4	3	0.1	0		
PHF	.792	.000	.659	.000	.250	.782	.750	.000	.500	.000	.250	.714	.857	.942	.643	.000	.000	.936	.417	.915	.705	.250	.000	.925	.955
Cars	36	0	58	0	1	95	15	0	4	0	1	20	46	780	18	0	0	844	5	965	30	1	0	1001	1960
% Cars	94.7	0	100	0	100	97.9	100	0	100	0	100	100	95.8	95.8	100	0	0	95.9	100	96.2	96.8	100	0	96.3	96.2
Trucks	2	0	0	0	0	2	0	0	0	0	0	0	2	18	0	0	0	20	0	32	1	0	0	33	55
% Trucks	5.3	0	0	0	0	2.1	0	0	0	0	0	0	4.2	2.2	0	0	0	2.3	0	3.2	3.2	0	0	3.2	2.7
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	16	0	6	0	0	0	6	22
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0	0	0	0	1.8	0	0.6	0	0	0	0.6	1.1

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Dunnigan Drive
N/S : Hemion Road
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Hemion Road (CR 93) and Dunnigan Drive
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Dunnigan Drive Westbound				Hemion Road Northbound				Hemion Road Southbound				
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
07:00 AM	3	0	0	3	50	5	0	55	1	36	0	37	95
07:15 AM	0	3	0	3	50	2	0	52	1	53	0	54	109
07:30 AM	0	4	0	4	110	1	0	111	2	74	0	76	191
07:45 AM	0	5	0	5	116	2	0	118	0	88	0	88	211
Total	3	12	0	15	326	10	0	336	4	251	0	255	606
08:00 AM	2	0	0	2	31	3	0	34	0	79	0	79	115
08:15 AM	3	1	0	4	45	3	0	48	1	53	0	54	106
08:30 AM	0	1	0	1	49	0	0	49	1	45	0	46	96
08:45 AM	2	0	0	2	48	0	0	48	1	82	0	83	133
Total	7	2	0	9	173	6	0	179	3	259	0	262	450
BREAK													
03:00 PM	0	4	0	4	71	2	0	73	0	67	0	67	144
03:15 PM	1	3	0	4	66	0	0	66	0	54	0	54	124
03:30 PM	1	5	3	9	79	2	0	81	0	81	0	81	171
03:45 PM	6	0	2	8	85	1	0	86	2	96	0	98	192
Total	8	12	5	25	301	5	0	306	2	298	0	300	631
04:00 PM	3	2	0	5	82	2	0	84	0	63	0	63	152
04:15 PM	3	3	4	10	82	2	0	84	1	57	0	58	152
04:30 PM	0	1	1	2	75	0	0	75	1	76	0	77	154
04:45 PM	1	2	1	4	80	2	0	82	1	55	0	56	142
Total	7	8	6	21	319	6	0	325	3	251	0	254	600
05:00 PM	4	2	0	6	96	1	0	97	0	74	0	74	177
05:15 PM	1	1	0	2	58	0	0	58	0	67	0	67	127
05:30 PM	2	1	0	3	62	0	0	62	4	47	0	51	116
05:45 PM	0	1	0	1	53	1	0	54	0	45	0	45	100
Total	7	5	0	12	269	2	0	271	4	233	0	237	520
06:00 PM	1	4	1	6	56	0	0	56	0	32	0	32	94
06:15 PM	3	2	1	6	41	0	0	41	2	37	0	39	86
Grand Total	36	45	13	94	1485	29	0	1514	18	1361	0	1379	2987
Apprch %	38.3	47.9	13.8		98.1	1.9	0		1.3	98.7	0		
Total %	1.2	1.5	0.4	3.1	49.7	1	0	50.7	0.6	45.6	0	46.2	
Cars	36	44	13	93	1422	29	0	1451	18	1289	0	1307	2851
% Cars	100	97.8	100	98.9	95.8	100	0	95.8	100	94.7	0	94.8	95.4
Trucks	0	1	0	1	15	0	0	15	0	12	0	12	28
% Trucks	0	2.2	0	1.1	1	0	0	1	0	0.9	0	0.9	0.9
Buses	0	0	0	0	48	0	0	48	0	60	0	60	108
% Buses	0	0	0	0	3.2	0	0	3.2	0	4.4	0	4.4	3.6

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Hemion Road (CR 93) and Dunnigan Drive
Site Code : 00000000
Start Date : 6/15/2022

	Dunnigan Drive Westbound				Hemion Road Northbound				Hemion Road Southbound				
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	0	**5**	0	**5**	**116**	2	0	**118**	0	**88**	0	**88**	**211**
08:00 AM	2	0	0	2	31	**3**	0	34	0	79	0	79	115
08:15 AM	**3**	1	0	4	45	3	0	48	**1**	53	0	54	106
08:30 AM	0	1	0	1	49	0	0	49	1	45	0	46	96
Total Volume	5	7	0	12	241	8	0	249	2	265	0	267	528
% App. Total	41.7	58.3	0		96.8	3.2	0		0.7	99.3	0		
PHF	.417	.350	.000	.600	.519	.667	.000	.528	.500	.753	.000	.759	.626
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:15 PM													
03:15 PM	1	3	0	4	66	0	0	66	0	54	0	54	124
03:30 PM	1	**5**	**3**	**9**	79	**2**	0	81	0	81	0	81	171
03:45 PM	**6**	0	2	8	**85**	1	0	**86**	**2**	**96**	0	**98**	**192**
04:00 PM	3	2	0	5	82	2	0	84	0	63	0	63	152
Total Volume	11	10	5	26	312	5	0	317	2	294	0	296	639
% App. Total	42.3	38.5	19.2		98.4	1.6	0		0.7	99.3	0		
PHF	.458	.500	.417	.722	.918	.625	.000	.922	.250	.766	.000	.755	.832

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W:Montebello Road
N/S : Hemion Road/Ryan Mansion Drive
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Hemion Road (CR 93) and Montebello Road (CR 64)
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Montebello Road Eastbound					Montebello Road Westbound					Hemion Road Northbound					Ryan Mansion Drive Southbound					
Start Time			Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	25	15	0	40	23	6	0	0	29	10	0	56	0	66	0	1	0	0	1	136
07:15 AM	0	26	34	0	60	33	13	0	0	46	13	0	32	0	45	1	0	0	0	1	152
07:30 AM	0	30	43	1	74	41	8	2	0	51	21	1	29	0	51	0	1	0	0	1	177
07:45 AM	0	33	75	0	108	80	24	0	0	104	23	0	36	0	59	0	0	0	0	0	271
Total	0	114	167	1	282	177	51	2	0	230	67	1	153	0	221	1	2	0	0	3	736
08:00 AM	0	24	29	0	53	53	17	0	0	70	17	0	36	0	53	1	0	0	0	1	177
08:15 AM	1	35	40	1	77	33	9	2	0	44	24	1	28	2	55	0	0	0	0	0	176
08:30 AM	0	32	35	0	67	25	6	2	0	33	12	0	37	0	49	0	0	0	0	0	149
08:45 AM	2	28	53	0	83	43	11	2	0	56	22	1	41	0	64	3	1	0	0	4	207
Total	3	119	157	1	280	154	43	6	0	203	75	2	142	2	221	4	1	0	0	5	709
BREAK																					
03:00 PM	0	17	36	0	53	43	23	1	0	67	35	0	38	0	73	1	2	0	0	3	196
03:15 PM	0	18	24	0	42	31	29	2	0	62	44	4	31	0	79	0	0	0	0	0	183
03:30 PM	0	21	28	0	49	39	27	1	0	67	38	1	46	0	85	0	1	3	0	4	205
03:45 PM	0	15	30	0	45	64	34	2	0	100	29	1	51	0	81	2	3	0	0	5	231
Total	0	71	118	0	189	177	113	6	0	296	146	6	166	0	318	3	6	3	0	12	815
04:00 PM	0	12	33	0	45	35	32	1	0	68	37	2	46	0	85	1	0	0	0	1	199
04:15 PM	1	19	24	0	44	26	34	4	0	64	33	2	40	0	75	0	0	1	0	1	184
04:30 PM	0	20	23	0	43	36	40	0	0	76	36	0	43	0	79	2	1	1	0	4	202
04:45 PM	1	15	15	0	31	29	28	0	0	57	36	1	52	0	89	2	1	0	0	3	180
Total	2	66	95	0	163	126	134	5	0	265	142	5	181	0	328	5	2	2	0	9	765
05:00 PM	0	16	17	0	33	32	25	1	0	58	34	1	56	1	92	6	3	3	0	12	195
05:15 PM	0	15	19	0	34	40	33	2	2	77	39	1	49	1	90	4	2	1	0	7	208
05:30 PM	0	20	29	0	49	37	29	1	2	69	43	1	36	0	80	0	0	0	0	0	198
05:45 PM	1	9	26	1	37	25	22	2	0	49	30	1	39	0	70	0	1	2	0	3	159
Total	1	60	91	1	153	134	109	6	4	253	146	4	180	2	332	10	6	6	0	22	760
06:00 PM	0	23	23	0	46	27	23	0	2	52	33	0	26	0	59	3	1	0	0	4	161
06:15 PM	1	11	16	0	28	21	25	1	0	47	26	1	36	0	63	0	0	1	0	1	139
Grand Total	7	464	667	3	1141	816	498	26	6	1346	635	19	884	4	1542	26	18	12	0	56	4085
Apprch %	0.6	40.7	58.5	0.3		60.6	37	1.9	0.4		41.2	1.2	57.3	0.3		46.4	32.1	21.4	0		
Total %	0.2	11.4	16.3	0.1	27.9	20	12.2	0.6	0.1	32.9	15.5	0.5	21.6	0.1	37.7	0.6	0.4	0.3	0	1.4	
Cars	7	444	631	3	1085	768	474	25	6	1273	605	19	841	4	1469	26	17	12	0	55	3882
% Cars	100	95.7	94.6	100	95.1	94.1	95.2	96.2	100	94.6	95.3	100	95.1	100	95.3	100	94.4	100	0	98.2	95
Trucks	0	6	5	0	11	8	4	1	0	13	8	0	9	0	17	0	1	0	0	1	42
% Trucks	0	1.3	0.7	0	1	1	0.8	3.8	0	1	1.3	0	1	0	1.1	0	5.6	0	0	1.8	1
Buses	0	14	31	0	45	40	20	0	0	60	22	0	34	0	56	0	0	0	0	0	161
% Buses	0	3	4.6	0	3.9	4.9	4	0	0	4.5	3.5	0	3.8	0	3.6	0	0	0	0	0	3.9

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Hemion Road (CR 93) and Montebello Road (CR 64)
Site Code : 00000000
Start Date : 6/15/2022

	Montebello Road Eastbound					Montebello Road Westbound					Hemion Road Northbound					Ryan Mansion Drive Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	33	**75**	0	**108**	**80**	**24**	0	0	**104**	23	0	36	0	**59**	0	0	0	0	0	**271**
08:00 AM	0	24	29	0	53	53	17	0	0	70	17	0	36	0	53	**1**	0	0	0	**1**	177
08:15 AM	**1**	**35**	40	**1**	77	33	9	**2**	0	44	**24**	**1**	28	**2**	55	0	0	0	0	0	176
08:30 AM	0	32	35	0	67	25	6	2	0	33	12	0	**37**	0	49	0	0	0	0	0	149
Total Volume	1	124	179	1	305	191	56	4	0	251	76	1	137	2	216	1	0	0	0	1	773
% App. Total	0.3	40.7	58.7	0.3		76.1	22.3	1.6	0		35.2	0.5	63.4	0.9		100	0	0	0		
PHF	.250	.886	.597	.250	.706	.597	.583	.500	.000	.603	.792	.250	.926	.250	.915	.250	.000	.000	.000	.250	.713
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	0	18	24	0	42	31	29	**2**	0	62	**44**	**4**	31	0	79	0	0	0	0	0	183
03:30 PM	0	**21**	28	0	**49**	39	27	1	0	67	38	1	46	0	**85**	0	1	**3**	0	4	205
03:45 PM	0	15	30	0	45	**64**	**34**	2	0	**100**	29	1	**51**	0	81	**2**	**3**	0	0	**5**	**231**
04:00 PM	0	12	**33**	0	45	35	32	1	0	68	37	2	46	0	85	1	0	0	0	1	199
Total Volume	0	66	115	0	181	169	122	6	0	297	148	8	174	0	330	3	4	3	0	10	818
% App. Total	0	36.5	63.5	0		56.9	41.1	2	0		44.8	2.4	52.7	0		30	40	30	0		
PHF	.000	.786	.871	.000	.923	.660	.897	.750	.000	.743	.841	.500	.853	.000	.971	.375	.333	.250	.000	.500	.885

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Lafayette Avenue
N/S : Brookside Avenue
Town/ County: Montebello/Rockland
Job # : 3709-99-004T

File Name : Lafayette Avenue (NY 59) and Brookside Avenue
Site Code : 00000000
Start Date : 6/15/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Lafayette Avenue Eastbound				Lafayette Avenue Westbound				Brookside Avenue Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
07:00 AM	80	2	0	82	11	95	0	106	1	28	0	29	217
07:15 AM	96	1	0	97	18	97	0	115	1	26	0	27	239
07:30 AM	134	4	0	138	15	123	0	138	1	26	0	27	303
07:45 AM	119	1	0	120	14	139	0	153	0	31	1	32	305
Total	429	8	0	437	58	454	0	512	3	111	1	115	1064
08:00 AM	122	5	0	127	13	127	0	140	1	29	0	30	297
08:15 AM	131	9	0	140	16	138	0	154	2	31	0	33	327
08:30 AM	128	1	0	129	21	140	0	161	3	28	1	32	322
08:45 AM	114	2	0	116	20	164	0	184	1	25	1	27	327
Total	495	17	0	512	70	569	0	639	7	113	2	122	1273
BREAK													
03:00 PM	151	5	0	156	25	152	0	177	3	23	0	26	359
03:15 PM	151	5	0	156	37	169	0	206	4	17	0	21	383
03:30 PM	170	2	0	172	49	158	1	208	4	25	1	30	410
03:45 PM	147	4	0	151	31	151	0	182	4	27	0	31	364
Total	619	16	0	635	142	630	1	773	15	92	1	108	1516
04:00 PM	160	4	0	164	27	152	0	179	7	24	0	31	374
04:15 PM	163	0	0	163	33	150	0	183	5	16	0	21	367
04:30 PM	155	2	0	157	40	140	0	180	3	20	0	23	360
04:45 PM	175	7	0	182	27	147	0	174	3	19	0	22	378
Total	653	13	0	666	127	589	0	716	18	79	0	97	1479
05:00 PM	155	4	0	159	26	172	0	198	2	16	0	18	375
05:15 PM	156	4	0	160	34	134	1	169	6	21	1	28	357
05:30 PM	140	4	0	144	41	149	0	190	8	21	0	29	363
05:45 PM	118	5	0	123	37	134	0	171	4	18	1	23	317
Total	569	17	0	586	138	589	1	728	20	76	2	98	1412
06:00 PM	146	4	0	150	30	100	0	130	3	25	1	29	309
06:15 PM	152	3	0	155	24	138	0	162	1	24	0	25	342
Grand Total	3063	78	0	3141	589	3069	2	3660	67	520	7	594	7395
Apprch %	97.5	2.5	0		16.1	83.9	0.1		11.3	87.5	1.2		
Total %	41.4	1.1	0	42.5	8	41.5	0	49.5	0.9	7	0.1	8	
Cars	2940	74	0	3014	564	2939	2	3505	63	503	7	573	7092
% Cars	96	94.9	0	96	95.8	95.8	100	95.8	94	96.7	100	96.5	95.9
Trucks	71	0	0	71	7	76	0	83	2	6	0	8	162
% Trucks	2.3	0	0	2.3	1.2	2.5	0	2.3	3	1.2	0	1.3	2.2
Buses	52	4	0	56	18	54	0	72	2	11	0	13	141
% Buses	1.7	5.1	0	1.8	3.1	1.8	0	2	3	2.1	0	2.2	1.9

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Lafayette Avenue (NY 59) and Brookside Avenue
Site Code : 00000000
Start Date : 6/15/2022

	Lafayette Avenue Eastbound				Lafayette Avenue Westbound				Brookside Avenue Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	119	1	0	120	14	139	0	153	0	**31**	**1**	32	305
08:00 AM	122	5	0	127	13	127	0	140	1	29	0	30	297
08:15 AM	**131**	**9**	0	**140**	16	138	0	154	2	31	0	**33**	**327**
08:30 AM	128	1	0	129	**21**	**140**	0	**161**	**3**	28	1	32	322
Total Volume	500	16	0	516	64	544	0	608	6	119	2	127	1251
% App. Total	96.9	3.1	0		10.5	89.5	0		4.7	93.7	1.6		
PHF	.954	.444	.000	.921	.762	.971	.000	.944	.500	.960	.500	.962	.956
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:15 PM													
03:15 PM	151	**5**	0	156	37	**169**	0	206	4	17	0	21	383
03:30 PM	**170**	2	0	**172**	**49**	158	**1**	**208**	4	25	**1**	30	**410**
03:45 PM	147	4	0	151	31	151	0	182	4	**27**	0	**31**	364
04:00 PM	160	4	0	164	27	152	0	179	**7**	24	0	31	374
Total Volume	628	15	0	643	144	630	1	775	19	93	1	113	1531
% App. Total	97.7	2.3	0		18.6	81.3	0.1		16.8	82.3	0.9		
PHF	.924	.750	.000	.935	.735	.932	.250	.931	.679	.861	.250	.911	.934

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W : Dunnigan Drive/Driveway
N/S: Airmont Road
Town/County : Montebello/Rockland
Job # : 3709-99-004T

File Name : Airmont Road (CR 89) and Dunnigan Drive
Site Code : 00000000
Start Date : 9/8/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Dunnigan Drive Eastbound					Driveway Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	7	0	9	0	16	0	0	0	0	0	6	214	0	0	220	3	166	15	0	184	420
07:15 AM	7	0	6	1	14	0	0	1	0	1	4	207	0	0	211	0	200	9	0	209	435
07:30 AM	3	0	7	1	11	1	0	0	0	1	1	226	0	0	227	3	218	19	0	240	479
07:45 AM	10	0	6	1	17	0	0	5	0	5	4	200	0	0	204	1	246	3	0	250	476
Total	27	0	28	3	58	1	0	6	0	7	15	847	0	0	862	7	830	46	0	883	1810
08:00 AM	5	0	5	0	10	0	0	2	0	2	5	222	0	0	227	0	251	5	0	256	495
08:15 AM	5	0	2	1	8	0	0	1	0	1	1	212	0	0	213	3	266	7	0	276	498
08:30 AM	7	0	2	0	9	0	0	1	0	1	2	246	2	0	250	0	255	7	0	262	522
08:45 AM	5	0	2	0	7	0	0	0	0	0	1	248	1	0	250	4	356	12	0	372	629
Total	22	0	11	1	34	0	0	4	0	4	9	928	3	0	940	7	1128	31	0	1166	2144
BREAK																					
03:00 PM	16	0	8	1	25	0	0	3	0	3	3	237	0	1	241	0	259	15	0	274	543
03:15 PM	9	0	6	2	17	0	0	1	0	1	2	256	1	0	259	1	299	10	0	310	587
03:30 PM	11	0	6	1	18	0	0	2	0	2	3	239	0	0	242	1	281	16	0	298	560
03:45 PM	10	0	5	0	15	0	0	1	0	1	2	228	0	1	231	1	261	14	0	276	523
Total	46	0	25	4	75	0	0	7	0	7	10	960	1	2	973	3	1100	55	0	1158	2213
04:00 PM	15	0	17	0	32	0	0	9	0	9	5	261	1	4	271	0	309	13	0	322	634
04:15 PM	7	0	7	0	14	0	0	4	0	4	7	283	1	0	291	0	248	10	0	258	567
04:30 PM	6	0	5	4	15	0	0	2	0	2	0	253	0	1	254	1	276	5	0	282	553
04:45 PM	6	0	7	0	13	1	0	1	0	2	1	261	0	0	262	0	267	9	0	276	553
Total	34	0	36	4	74	1	0	16	0	17	13	1058	2	5	1078	1	1100	37	0	1138	2307
05:00 PM	5	0	2	0	7	0	0	0	0	0	0	279	0	0	279	0	278	4	0	282	568
05:15 PM	6	0	3	0	9	0	0	0	0	0	1	313	0	0	314	0	284	4	0	288	611
05:30 PM	5	0	3	0	8	0	0	1	0	1	0	285	1	0	286	0	251	7	0	258	553
05:45 PM	5	0	0	0	5	0	0	0	0	0	5	245	0	0	250	2	268	5	0	275	530
Total	21	0	8	0	29	0	0	1	0	1	6	1122	1	0	1129	2	1081	20	0	1103	2262
06:00 PM	4	0	4	0	8	0	0	2	0	2	1	250	0	0	251	0	263	5	0	268	529
06:15 PM	5	0	1	0	6	0	0	0	0	0	2	202	0	0	204	0	261	4	0	265	475
Grand Total	159	0	113	12	284	2	0	36	0	38	56	5367	7	7	5437	20	5763	198	0	5981	11740
Apprch %	56	0	39.8	4.2		5.3	0	94.7	0		1	98.7	0.1	0.1		0.3	96.4	3.3	0		
Total %	1.4	0	1	0.1	2.4	0	0	0.3	0	0.3	0.5	45.7	0.1	0.1	46.3	0.2	49.1	1.7	0	50.9	
Cars	99	0	95	12	206	2	0	19	0	21	49	5113	5	7	5174	7	5504	133	0	5644	11045
% Cars	62.3	0	84.1	100	72.5	100	0	52.8	0	55.3	87.5	95.3	71.4	100	95.2	35	95.5	67.2	0	94.4	94.1
Trucks	60	0	18	0	78	0	0	17	0	17	7	175	2	0	184	13	174	65	0	252	531
% Trucks	37.7	0	15.9	0	27.5	0	0	47.2	0	44.7	12.5	3.3	28.6	0	3.4	65	3	32.8	0	4.2	4.5
Buses	0	0	0	0	0	0	0	0	0	0	0	79	0	0	79	0	85	0	0	85	164
% Buses	0	0	0	0	0	0	0	0	0	0	0	1.5	0	0	1.5	0	1.5	0	0	1.4	1.4

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Airmont Road (CR 89) and Dunnigan Drive
Site Code : 00000000
Start Date : 9/8/2022
Page No : 2

	Dunnigan Drive Eastbound					Driveway Westbound					Airmont Road Northbound					Airmont Road Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	10	0	6	1	17	0	0	5	0	5	4	200	0	0	204	1	246	3	0	250	476
08:00 AM	5	0	5	0	10	0	0	2	0	2	5	222	0	0	227	0	251	5	0	256	495
08:15 AM	5	0	2	1	8	0	0	1	0	1	1	212	0	0	213	3	266	7	0	276	498
08:30 AM	7	0	2	0	9	0	0	1	0	1	2	246	2	0	250	0	255	7	0	262	522
Total Volume	27	0	15	2	44	0	0	9	0	9	12	880	2	0	894	4	1018	22	0	1044	1991
% App. Total	61.4	0	34.1	4.5		0	0	100	0		1.3	98.4	0.2	0		0.4	97.5	2.1	0		
PHF	.675	.000	.625	.500	.647	.000	.000	.450	.000	.450	.600	.894	.250	.000	.894	.333	.957	.786	.000	.946	.954
Cars	9	0	9	2	20	0	0	2	0	2	8	825	1	0	834	1	949	11	0	961	1817
% Cars	33.3	0	60.0	100	45.5	0	0	22.2	0	22.2	66.7	93.8	50.0	0	93.3	25.0	93.2	50.0	0	92.0	91.3
Trucks	18	0	6	0	24	0	0	7	0	7	4	43	1	0	48	3	49	11	0	63	142
% Trucks	66.7	0	40.0	0	54.5	0	0	77.8	0	77.8	33.3	4.9	50.0	0	5.4	75.0	4.8	50.0	0	6.0	7.1
Buses	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12	0	20	0	0	20	32
% Buses	0	0	0	0	0	0	0	0	0	0	0	1.4	0	0	1.3	0	2.0	0	0	1.9	1.6
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	9	0	6	2	17	0	0	1	0	1	2	256	1	0	259	1	299	10	0	310	587
03:30 PM	11	0	6	1	18	0	0	2	0	2	3	239	0	0	242	1	281	16	0	298	560
03:45 PM	10	0	5	0	15	0	0	1	0	1	2	228	0	1	231	1	261	14	0	276	523
04:00 PM	15	0	17	0	32	0	0	9	0	9	5	261	1	4	271	0	309	13	0	322	634
Total Volume	45	0	34	3	82	0	0	13	0	13	12	984	2	5	1003	3	1150	53	0	1206	2304
% App. Total	54.9	0	41.5	3.7		0	0	100	0		1.2	98.1	0.2	0.5		0.2	95.4	4.4	0		
PHF	.750	.000	.500	.375	.641	.000	.000	.361	.000	.361	.600	.943	.500	.313	.925	.750	.930	.828	.000	.936	.909
Cars	35	0	30	3	68	0	0	9	0	9	10	929	1	5	945	0	1102	35	0	1137	2159
% Cars	77.8	0	88.2	100	82.9	0	0	69.2	0	69.2	83.3	94.4	50.0	100	94.2	0	95.8	66.0	0	94.3	93.7
Trucks	10	0	4	0	14	0	0	4	0	4	2	39	1	0	42	3	28	18	0	49	109
% Trucks	22.2	0	11.8	0	17.1	0	0	30.8	0	30.8	16.7	4.0	50.0	0	4.2	100	2.4	34.0	0	4.1	4.7
Buses	0	0	0	0	0	0	0	0	0	0	0	16	0	0	16	0	20	0	0	20	36
% Buses	0	0	0	0	0	0	0	0	0	0	0	1.6	0	0	1.6	0	1.7	0	0	1.7	1.6

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Suffern Middle School Ingress Driveway
N/S: Hemion Road (CR 93)
Town/County: Montebello/Rockland
Job #: 3709-99-004T

File Name : Hemion Rd_Ingress Driveway_Ramapo Cirque
Site Code : 00000000
Start Date : 9/8/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Ramapo Cirque Boulevard Eastbound					Suffern Middle School Ingress Driveway Westbound					Hemion Road (CR 93) Northbound					Hemion Road (CR 93) Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
*** BREAK ***																					
07:00 AM	7	1	2	0	10	0	0	0	0	0	0	56	6	0	62	3	37	0	0	40	112
07:15 AM	1	0	0	0	1	0	0	0	0	0	1	34	8	0	43	13	65	2	0	80	124
07:30 AM	5	2	3	0	10	0	0	0	0	0	0	42	38	1	81	38	59	1	0	98	189
07:45 AM	0	1	3	0	4	0	0	0	0	0	3	46	47	0	96	37	93	1	0	131	231
Total	13	4	8	0	25	0	0	0	0	0	4	178	99	1	282	91	254	4	0	349	656
08:00 AM	3	0	3	0	6	0	0	0	2	2	1	46	4	0	51	7	57	0	0	64	123
08:15 AM	1	1	2	0	4	0	0	0	0	0	1	47	0	0	48	0	51	2	0	53	105
08:30 AM	5	0	1	2	8	0	0	0	0	0	5	64	2	0	71	2	74	2	0	78	157
08:45 AM	6	0	2	2	10	0	0	0	0	0	1	44	2	0	47	3	69	2	0	74	131
Total	15	1	8	4	28	0	0	0	2	2	8	201	8	0	217	12	251	6	0	269	516
*** BREAK ***																					
03:00 PM	4	0	1	1	6	0	0	0	0	0	1	65	4	0	70	0	88	4	0	92	168
03:15 PM	3	2	2	0	7	0	0	0	0	0	3	57	8	0	68	5	73	1	0	79	154
03:30 PM	5	0	2	1	8	0	0	0	0	0	5	76	11	0	92	13	75	7	3	98	198
03:45 PM	2	0	1	0	3	0	0	0	0	0	3	77	3	0	83	3	73	1	0	77	163
Total	14	2	6	2	24	0	0	0	0	0	12	275	26	0	313	21	309	13	3	346	683
04:00 PM	2	0	1	2	5	0	0	0	0	0	0	82	4	0	86	7	55	5	0	67	158
04:15 PM	3	0	3	0	6	0	0	0	0	0	3	68	3	0	74	7	55	6	0	68	148
04:30 PM	0	0	3	0	3	0	0	0	2	2	8	75	3	0	86	6	71	4	1	82	173
04:45 PM	3	0	2	0	5	0	0	0	0	0	9	65	13	0	87	6	67	1	0	74	166
Total	8	0	9	2	19	0	0	0	2	2	20	290	23	0	333	26	248	16	1	291	645
05:00 PM	1	0	4	0	5	0	0	0	0	0	5	87	2	0	94	2	62	3	1	68	167
05:15 PM	2	0	1	0	3	0	0	0	0	0	1	79	1	0	81	1	61	6	0	68	152
05:30 PM	5	0	2	1	8	0	0	0	0	0	1	63	0	0	64	5	55	2	0	62	134
05:45 PM	5	0	7	0	12	0	0	0	0	0	2	50	2	0	54	6	54	4	0	64	130
Total	13	0	14	1	28	0	0	0	0	0	9	279	5	0	293	14	232	15	1	262	583
06:00 PM	0	0	1	0	1	0	0	1	0	1	2	55	2	0	59	1	61	1	0	63	124
06:15 PM	0	0	2	2	4	0	0	0	0	0	4	56	1	0	61	4	52	8	1	65	130
Grand Total	63	7	48	11	129	0	0	1	4	5	59	1334	164	1	1558	169	1407	63	6	1645	3337
Apprch %	48.8	5.4	37.2	8.5		0	0	20	80		3.8	85.6	10.5	0.1		10.3	85.5	3.8	0.4		
Total %	1.9	0.2	1.4	0.3	3.9	0	0	0	0.1	0.1	1.8	40	4.9	0	46.7	5.1	42.2	1.9	0.2	49.3	
Cars	62	7	47	11	127	0	0	1	4	5	57	1280	149	1	1487	143	1314	63	6	1526	3145
% Cars	98.4	100	97.9	100	98.4	0	0	100	100	100	96.6	96	90.9	100	95.4	84.6	93.4	100	100	92.8	94.2
Trucks	1	0	1	0	2	0	0	0	0	0	2	19	2	0	23	1	19	0	0	20	45
% Trucks	1.6	0	2.1	0	1.6	0	0	0	0	0	3.4	1.4	1.2	0	1.5	0.6	1.4	0	0	1.2	1.3
Buses	0	0	0	0	0	0	0	0	0	0	0	35	13	0	48	25	74	0	0	99	147
% Buses	0	0	0	0	0	0	0	0	0	0	0	2.6	7.9	0	3.1	14.8	5.3	0	0	6	4.4

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Suffern Middle School Ingress Driveway
N/S: Hemion Road (CR 93)
Town/County: Montebello/Rockland
Job #: 3709-99-004T

File Name : Hemion Rd_Ingress Driveway_Ramapo Cirque
Site Code : 00000000
Start Date : 9/8/2022
Page No : 2

	Ramapo Cirque Boulevard Eastbound					Suffern Middle School Ingress Driveway Westbound					Hemion Road (CR 93) Northbound					Hemion Road (CR 93) Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	**1**	**3**	0	4	0	0	0	0	0	3	46	**47**	0	**96**	**37**	**93**	1	0	**131**	**231**
08:00 AM	3	0	3	0	6	0	0	0	**2**	**2**	1	46	4	0	51	7	57	0	0	64	123
08:15 AM	1	1	2	0	4	0	0	0	0	0	1	47	0	0	48	0	51	**2**	0	53	105
08:30 AM	**5**	0	1	**2**	**8**	0	0	0	0	0	**5**	**64**	2	0	71	2	74	2	0	78	157
Total Volume	9	2	9	2	22	0	0	0	2	2	10	203	53	0	266	46	275	5	0	326	616
% App. Total	40.9	9.1	40.9	9.1		0	0	0	100		3.8	76.3	19.9	0		14.1	84.4	1.5	0		
PHF	.450	.500	.750	.250	.688	.000	.000	.000	.250	.250	.500	.793	.282	.000	.693	.311	.739	.625	.000	.622	.667
Cars	9	2	9	2	22	0	0	0	2	2	9	190	44	0	243	30	245	5	0	280	547
% Cars	100	100	100	100	100	0	0	0	100	100	90.0	93.6	83.0	0	91.4	65.2	89.1	100	0	85.9	88.8
Trucks	0	0	0	0	0	0	0	0	0	0	1	4	1	0	6	1	5	0	0	6	12
% Trucks	0	0	0	0	0	0	0	0	0	0	10.0	2.0	1.9	0	2.3	2.2	1.8	0	0	1.8	1.9
Buses	0	0	0	0	0	0	0	0	0	0	0	9	8	0	17	15	25	0	0	40	57
% Buses	0	0	0	0	0	0	0	0	0	0	0	4.4	15.1	0	6.4	32.6	9.1	0	0	12.3	9.3
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	3	**2**	**2**																		
03:30 PM	**5**	0	2	1	**8**	0	0	0	0	0	**5**	76	**11**	0	**92**	**13**	**75**	**7**	**3**	**98**	**198**
03:45 PM	2	0	1	0	3	0	0	0	0	0	3	77	3	0	83	3	73	1	0	77	163
04:00 PM	2	0	1	**2**	5	0	0	0	0	0	0	**82**	4	0	86	7	55	5	0	67	158
Total Volume	12	2	6	3	23	0	0	0	0	0	11	292	26	0	329	28	276	14	3	321	673
% App. Total	52.2	8.7	26.1	13		0	0	0	0		3.3	88.8	7.9	0		8.7	86	4.4	0.9		
PHF	.600	.250	.750	.375	.719	.000	.000	.000	.000	.000	.550	.890	.591	.000	.894	.538	.920	.500	.250	.819	.850
Cars	12	2	6	3	23	0	0	0	0	0	11	277	24	0	312	23	262	14	3	302	637
% Cars	100	100	100	100	100	0	0	0	0	0	100	94.9	92.3	0	94.8	82.1	94.9	100	100	94.1	94.7
Trucks	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6	0	5	0	0	5	11
% Trucks	0	0	0	0	0	0	0	0	0	0	0	1.7	3.8	0	1.8	0	1.8	0	0	1.6	1.6
Buses	0	0	0	0	0	0	0	0	0	0	0	10	1	0	11	5	9	0	0	14	25
% Buses	0	0	0	0	0	0	0	0	0	0	0	3.4	3.8	0	3.3	17.9	3.3	0	0	4.4	3.7

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W : Suffern Middle School Egress Drive
N/S : Hemion Road
Town/County : Montebello/Rockland
Job # : 3709-99-004T

File Name : Hemion Road & Suffern Middle School Egress Driveway
Site Code : 00000000
Start Date : 9/8/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Suffern Middle School Egress Driveway Westbound				Hemion Road Northbound					Hemion Road Southbound				
Start Time	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
07:00 AM	2	1	0	3	0	64	0	0	64	34	4	0	38	105
07:15 AM	2	0	0	2	0	34	0	0	34	65	14	0	79	115
07:30 AM	0	0	0	0	0	48	0	0	48	92	6	0	98	146
07:45 AM	15	8	0	23	0	46	0	0	46	97	20	0	117	186
Total	19	9	0	28	0	192	0	0	192	288	44	0	332	552
08:00 AM	4	8	2	14	0	50	0	0	50	56	2	0	58	122
08:15 AM	4	1	0	5	0	48	0	0	48	47	3	0	50	103
08:30 AM	0	2	0	2	1	68	0	0	69	72	5	0	77	148
08:45 AM	1	2	0	3	0	49	0	0	49	71	1	0	72	124
Total	9	13	2	24	1	215	0	0	216	246	11	0	257	497
BREAK														
03:00 PM	12	10	0	22	1	71	0	0	72	69	11	1	81	175
03:15 PM	10	12	0	22	0	59	0	0	59	67	3	0	70	151
03:30 PM	13	11	0	24	1	80	0	0	81	79	2	1	82	187
03:45 PM	5	3	1	9	0	78	0	0	78	67	7	0	74	161
Total	40	36	1	77	2	288	0	0	290	282	23	2	307	674
04:00 PM	1	8	0	9	0	86	0	0	86	56	7	0	63	158
04:15 PM	3	1	1	5	0	71	0	1	72	64	2	0	66	143
04:30 PM	5	3	2	10	0	72	0	0	72	72	4	0	76	158
04:45 PM	11	12	0	23	1	68	0	0	69	57	5	0	62	154
Total	20	24	3	47	1	297	0	1	299	249	18	0	267	613
05:00 PM	1	2	1	4	1	89	0	0	90	65	1	0	66	160
05:15 PM	1	4	0	5	0	80	0	0	80	66	1	0	67	152
05:30 PM	1	2	0	3	0	69	0	0	69	60	1	0	61	133
05:45 PM	1	1	0	2	0	53	0	0	53	62	1	0	63	118
Total	4	9	1	14	1	291	0	0	292	253	4	0	257	563
06:00 PM	3	5	0	8	0	57	0	0	57	60	0	0	60	125
06:15 PM	4	1	0	5	0	54	0	0	54	60	0	0	60	119
Grand Total	99	97	7	203	5	1394	0	1	1400	1438	100	2	1540	3143
Apprch %	48.8	47.8	3.4		0.4	99.6	0	0.1		93.4	6.5	0.1		
Total %	3.1	3.1	0.2	6.5	0.2	44.4	0	0	44.5	45.8	3.2	0.1	49	
Cars	78	77	7	162	5	1339	0	1	1345	1438	2	2	1442	2949
% Cars	78.8	79.4	100	79.8	100	96.1	0	100	96.1	100	2	100	93.6	93.8
Trucks	1	1	0	2	0	20	0	0	20	0	19	0	19	41
% Trucks	1	1	0	1	0	1.4	0	0	1.4	0	19	0	1.2	1.3
Buses	20	19	0	39	0	35	0	0	35	0	79	0	79	153
% Buses	20.2	19.6	0	19.2	0	2.5	0	0	2.5	0	79	0	5.1	4.9

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Hemion Road & Suffern Middle School Egress Driveway
Site Code : 00000000
Start Date : 9/8/2022
Page No : 2

	Suffern Middle School Egress Driveway Westbound				Hemion Road Northbound					Hemion Road Southbound				
Start Time	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:45 AM														
07:45 AM	**15**	**8**	0	**23**	0	46	0	0	46	**97**	**20**	0	**117**	**186**
08:00 AM	4	8	**2**	14	0	50	0	0	50	56	2	0	58	122
08:15 AM	4	1	0	5	0	48	0	0	48	47	3	0	50	103
08:30 AM	0	2	0	2	**1**	**68**	0	0	**69**	72	5	0	77	148
Total Volume	23	19	2	44	1	212	0	0	213	272	30	0	302	559
% App. Total	52.3	43.2	4.5		0.5	99.5	0	0		90.1	9.9	0		
PHF	.383	.594	.250	.478	.250	.779	.000	.000	.772	.701	.375	.000	.645	.751
Cars	7	10	2	19	1	199	0	0	200	272	0	0	272	491
% Cars	30.4	52.6	100	43.2	100	93.9	0	0	93.9	100	0	0	90.1	87.8
Trucks	0	1	0	1	0	4	0	0	4	0	6	0	6	11
% Trucks	0	5.3	0	2.3	0	1.9	0	0	1.9	0	20.0	0	2.0	2.0
Buses	16	8	0	24	0	9	0	0	9	0	24	0	24	57
% Buses	69.6	42.1	0	54.5	0	4.2	0	0	4.2	0	80.0	0	7.9	10.2
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 03:15 PM														
03:15 PM	10	**12**	0	22	0	59	0	0	59	67	3	0	70	151
03:30 PM	**13**	11	0	**24**	**1**	80	0	0	81	**79**	2	**1**	**82**	**187**
03:45 PM	5	3	**1**	9	0	78	0	0	78	67	**7**	0	74	161
04:00 PM	1	8	0	9	0	**86**	0	0	**86**	56	7	0	63	158
Total Volume	29	34	1	64	1	303	0	0	304	269	19	1	289	657
% App. Total	45.3	53.1	1.6		0.3	99.7	0	0		93.1	6.6	0.3		
PHF	.558	.708	.250	.667	.250	.881	.000	.000	.884	.851	.679	.250	.881	.878
Cars	29	28	1	58	1	288	0	0	289	269	0	1	270	617
% Cars	100	82.4	100	90.6	100	95.0	0	0	95.1	100	0	100	93.4	93.9
Trucks	0	0	0	0	0	5	0	0	5	0	5	0	5	10
% Trucks	0	0	0	0	0	1.7	0	0	1.6	0	26.3	0	1.7	1.5
Buses	0	6	0	6	0	10	0	0	10	0	14	0	14	30
% Buses	0	17.6	0	9.4	0	3.3	0	0	3.3	0	73.7	0	4.8	4.6

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W : Montebello Road
N/S : Suffern Middle School Drive
Town/County : Montebello/Rockland
Job # : 3709-99-004T

File Name : Montebello Road & Suffern Middle School Driveway
Site Code : 00000000
Start Date : 9/8/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Montebello Road Eastbound				Montebello Road Westbound				Suffern Middle School Drive Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
07:00 AM	72	8	0	80	7	28	0	35	0	1	0	1	116
07:15 AM	37	9	0	46	11	53	0	64	1	3	0	4	114
07:30 AM	40	16	0	56	27	56	0	83	15	30	0	45	184
07:45 AM	50	13	0	63	5	49	0	54	33	41	0	74	191
Total	199	46	0	245	50	186	0	236	49	75	0	124	605
08:00 AM	53	3	0	56	2	35	0	37	5	2	0	7	100
08:15 AM	63	1	0	64	1	37	0	38	3	0	0	3	105
08:30 AM	67	3	0	70	0	55	0	55	0	1	0	1	126
08:45 AM	49	0	0	49	1	42	0	43	6	0	0	6	98
Total	232	7	0	239	4	169	0	173	14	3	0	17	429
BREAK													
03:00 PM	42	8	0	50	2	60	0	62	10	10	0	20	132
03:15 PM	44	9	0	53	6	69	0	75	15	2	1	18	146
03:30 PM	58	6	0	64	6	69	0	75	11	13	0	24	163
03:45 PM	59	2	0	61	2	48	1	51	5	4	0	9	121
Total	203	25	0	228	16	246	1	263	41	29	1	71	562
04:00 PM	64	5	0	69	9	65	0	74	5	2	0	7	150
04:15 PM	58	2	0	60	3	75	0	78	1	1	1	3	141
04:30 PM	58	7	0	65	7	69	0	76	3	1	0	4	145
04:45 PM	55	5	0	60	3	67	0	70	3	5	2	10	140
Total	235	19	0	254	22	276	0	298	12	9	3	24	576
05:00 PM	70	2	0	72	1	54	0	55	3	0	1	4	131
05:15 PM	78	1	0	79	0	67	0	67	0	1	0	1	147
05:30 PM	63	1	0	64	3	73	0	76	0	0	0	0	140
05:45 PM	43	7	0	50	1	70	0	71	0	3	0	3	124
Total	254	11	0	265	5	264	0	269	3	4	1	8	542
06:00 PM	43	3	0	46	2	56	0	58	6	10	0	16	120
06:15 PM	52	1	0	53	1	65	0	66	2	2	0	4	123
Grand Total	1218	112	0	1330	100	1262	1	1363	127	132	5	264	2957
Apprch %	91.6	8.4	0		7.3	92.6	0.1		48.1	50	1.9		
Total %	41.2	3.8	0	45	3.4	42.7	0	46.1	4.3	4.5	0.2	8.9	
Cars	1154	107	0	1261	95	1165	1	1261	124	124	5	253	2775
% Cars	94.7	95.5	0	94.8	95	92.3	100	92.5	97.6	93.9	100	95.8	93.8
Trucks	20	0	0	20	0	22	0	22	0	2	0	2	44
% Trucks	1.6	0	0	1.5	0	1.7	0	1.6	0	1.5	0	0.8	1.5
Buses	44	5	0	49	5	75	0	80	3	6	0	9	138
% Buses	3.6	4.5	0	3.7	5	5.9	0	5.9	2.4	4.5	0	3.4	4.7

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Montebello Road & Suffern Middle School Driveway
Site Code : 00000000
Start Date : 9/8/2022
Page No : 2

	Montebello Road Eastbound				Montebello Road Westbound				Suffern Middle School Drive Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	50	**13**	0	63	**5**	49	0	54	**33**	**41**	0	**74**	**191**
08:00 AM	53	3	0	56	2	35	0	37	5	2	0	7	100
08:15 AM	63	1	0	64	1	37	0	38	3	0	0	3	105
08:30 AM	**67**	3	0	**70**	0	**55**	0	**55**	0	1	0	1	126
Total Volume	233	20	0	253	8	176	0	184	41	44	0	85	522
% App. Total	92.1	7.9	0		4.3	95.7	0		48.2	51.8	0		
PHF	.869	.385	.000	.904	.400	.800	.000	.836	.311	.268	.000	.287	.683
Cars	212	17	0	229	4	152	0	156	39	37	0	76	461
% Cars	91.0	85.0	0	90.5	50.0	86.4	0	84.8	95.1	84.1	0	89.4	88.3
Trucks	3	0	0	3	0	8	0	8	0	1	0	1	12
% Trucks	1.3	0	0	1.2	0	4.5	0	4.3	0	2.3	0	1.2	2.3
Buses	18	3	0	21	4	16	0	20	2	6	0	8	49
% Buses	7.7	15.0	0	8.3	50.0	9.1	0	10.9	4.9	13.6	0	9.4	9.4
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:15 PM													
03:15 PM	44	**9**	0	53	6	**69**	0	**75**	**15**	2	**1**	18	146
03:30 PM	58	6	0	64	6	69	0	75	11	**13**	0	**24**	**163**
03:45 PM	59	2	0	61	2	48	**1**	51	5	4	0	9	121
04:00 PM	**64**	5	0	**69**	**9**	65	0	74	5	2	0	7	150
Total Volume	225	22	0	247	23	251	1	275	36	21	1	58	580
% App. Total	91.1	8.9	0		8.4	91.3	0.4		62.1	36.2	1.7		
PHF	.879	.611	.000	.895	.639	.909	.250	.917	.600	.404	.250	.604	.890
Cars	209	21	0	230	23	235	1	259	36	21	1	58	547
% Cars	92.9	95.5	0	93.1	100	93.6	100	94.2	100	100	100	100	94.3
Trucks	6	0	0	6	0	4	0	4	0	0	0	0	10
% Trucks	2.7	0	0	2.4	0	1.6	0	1.5	0	0	0	0	1.7
Buses	10	1	0	11	0	12	0	12	0	0	0	0	23
% Buses	4.4	4.5	0	4.5	0	4.8	0	4.4	0	0	0	0	4.0

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W : Montebello Road
N/S : Elementary Drive
Town/County : Montebello/Rockland
Job # : 3709-00-004T

File Name : Montebello Road & Elementary Drive
Site Code : 00000000
Start Date : 9/8/2022
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Montebello Road Eastbound				Montebello Road Westbound				Elementary Drive Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
07:00 AM	88	6	0	94	1	33	0	34	2	4	0	6	134
07:15 AM	39	5	0	44	3	62	0	65	4	3	0	7	116
07:30 AM	56	8	0	64	9	78	0	87	3	3	0	6	157
07:45 AM	70	11	0	81	18	42	0	60	5	4	0	9	150
Total	253	30	0	283	31	215	0	246	14	14	0	28	557
08:00 AM	43	13	0	56	14	30	0	44	2	2	0	4	104
08:15 AM	43	22	0	65	24	28	0	52	11	10	0	21	138
08:30 AM	52	20	0	72	7	44	2	53	19	18	0	37	162
08:45 AM	50	3	0	53	3	38	0	41	4	3	0	7	101
Total	188	58	0	246	48	140	2	190	36	33	0	69	505
BREAK													
03:00 PM	53	1	0	54	3	61	0	64	6	6	0	12	130
03:15 PM	34	18	0	52	11	56	0	67	22	19	0	41	160
03:30 PM	68	2	0	70	2	64	0	66	14	21	0	35	171
03:45 PM	56	1	0	57	2	45	0	47	7	4	0	11	115
Total	211	22	0	233	18	226	0	244	49	50	0	99	576
04:00 PM	70	2	0	72	1	71	0	72	2	7	0	9	153
04:15 PM	58	3	0	61	4	77	0	81	4	1	0	5	147
04:30 PM	47	4	0	51	10	69	1	80	5	4	0	9	140
04:45 PM	58	3	0	61	2	61	0	63	7	3	0	10	134
Total	233	12	0	245	17	278	1	296	18	15	0	33	574
05:00 PM	73	1	0	74	4	56	0	60	1	3	0	4	138
05:15 PM	67	3	0	70	6	72	0	78	2	1	0	3	151
05:30 PM	60	5	0	65	2	67	0	69	7	5	0	12	146
05:45 PM	54	3	0	57	4	69	2	75	5	4	0	9	141
Total	254	12	0	266	16	264	2	282	15	13	0	28	576
06:00 PM	53	0	0	53	3	56	0	59	0	4	0	4	116
06:15 PM	47	1	0	48	0	63	0	63	2	1	0	3	114
Grand Total	1239	135	0	1374	133	1242	5	1380	134	130	0	264	3018
Apprch %	90.2	9.8	0		9.6	90	0.4		50.8	49.2	0		
Total %	41.1	4.5	0	45.5	4.4	41.2	0.2	45.7	4.4	4.3	0	8.7	
Cars	1183	121	0	1304	120	1156	5	1281	114	118	0	232	2817
% Cars	95.5	89.6	0	94.9	90.2	93.1	100	92.8	85.1	90.8	0	87.9	93.3
Trucks	20	1	0	21	0	23	0	23	0	0	0	0	44
% Trucks	1.6	0.7	0	1.5	0	1.9	0	1.7	0	0	0	0	1.5
Buses	36	13	0	49	13	63	0	76	20	12	0	32	157
% Buses	2.9	9.6	0	3.6	9.8	5.1	0	5.5	14.9	9.2	0	12.1	5.2

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

File Name : Montebello Road & Elementary Drive
Site Code : 00000000
Start Date : 9/8/2022

	Montebello Road Eastbound				Montebello Road Westbound				Elementary Drive Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	70	11	0	81	18	42	0	60	5	4	0	9	150
08:00 AM	43	13	0	56	14	30	0	44	2	2	0	4	104
08:15 AM	43	22	0	65	24	28	0	52	11	10	0	21	138
08:30 AM	52	20	0	72	7	44	2	53	19	18	0	37	162
Total Volume	208	66	0	274	63	144	2	209	37	34	0	71	554
% App. Total	75.9	24.1	0		30.1	68.9	1		52.1	47.9	0		
PHF	.743	.750	.000	.846	.656	.818	.250	.871	.487	.472	.000	.480	.855
Cars	195	54	0	249	61	119	2	182	31	27	0	58	489
% Cars	93.8	81.8	0	90.9	96.8	82.6	100	87.1	83.8	79.4	0	81.7	88.3
Trucks	3	1	0	4	0	7	0	7	0	0	0	0	11
% Trucks	1.4	1.5	0	1.5	0	4.9	0	3.3	0	0	0	0	2.0
Buses	10	11	0	21	2	18	0	20	6	7	0	13	54
% Buses	4.8	16.7	0	7.7	3.2	12.5	0	9.6	16.2	20.6	0	18.3	9.7
Peak Hour Analysis From 03:15 PM to 04:00 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:15 PM													
03:15 PM	34	18	0	52	11	56	0	67	22	19	0	41	160
03:30 PM	68	2	0	70	2	64	0	66	14	21	0	35	171
03:45 PM	56	1	0	57	2	45	0	47	7	4	0	11	115
04:00 PM	70	2	0	72	1	71	0	72	2	7	0	9	153
Total Volume	228	23	0	251	16	236	0	252	45	51	0	96	599
% App. Total	90.8	9.2	0		6.3	93.7	0		46.9	53.1	0		
PHF	.814	.319	.000	.872	.364	.831	.000	.875	.511	.607	.000	.585	.876
Cars	213	22	0	235	11	225	0	236	39	49	0	88	559
% Cars	93.4	95.7	0	93.6	68.8	95.3	0	93.7	86.7	96.1	0	91.7	93.3
Trucks	6	0	0	6	0	5	0	5	0	0	0	0	11
% Trucks	2.6	0	0	2.4	0	2.1	0	2.0	0	0	0	0	1.8
Buses	9	1	0	10	5	6	0	11	6	2	0	8	29
% Buses	3.9	4.3	0	4.0	31.3	2.5	0	4.4	13.3	3.9	0	8.3	4.8

Location : Lafayette Ave & Hemion Rd

Location 1 (N/S): Hemion Rd/Campbell Ave

Location 2 (E/W): Lafayette Ave

Collect Date: 5/7/19

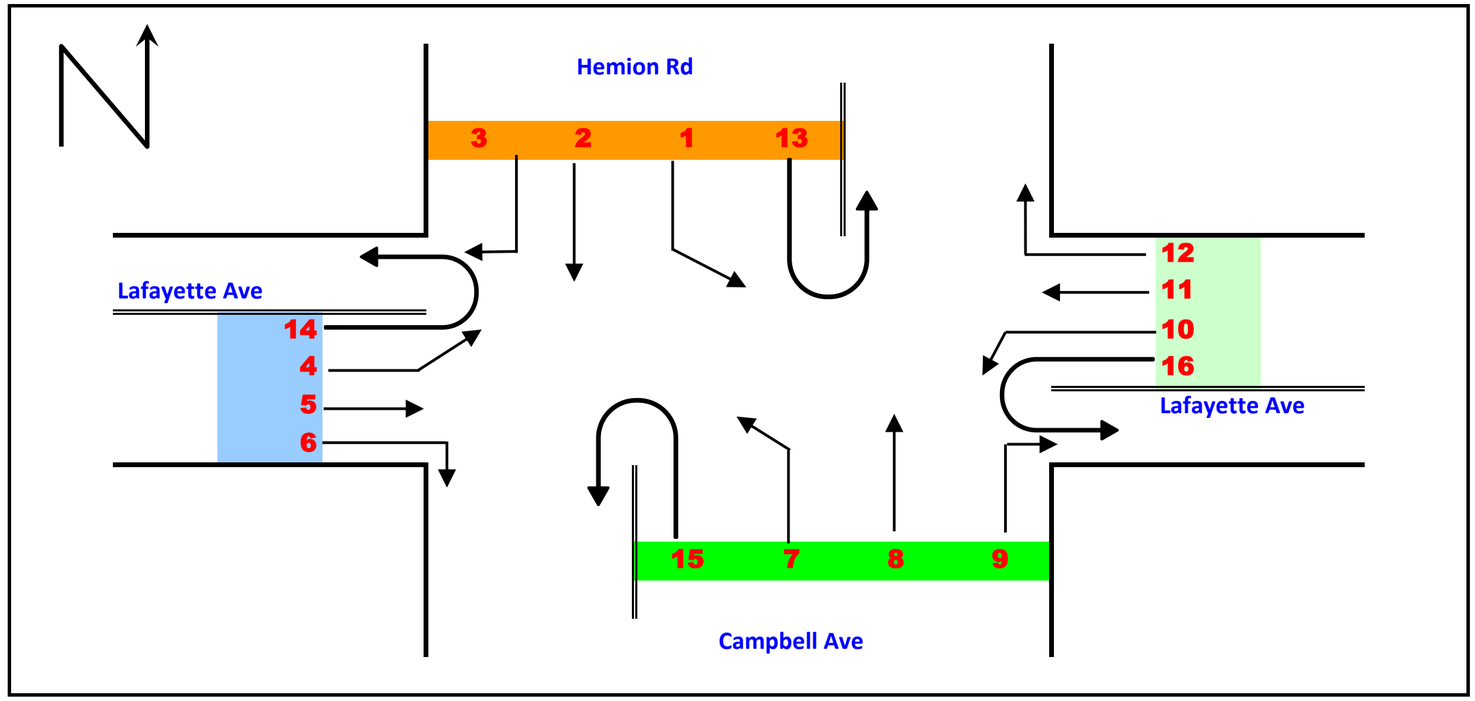
Period: AM/MD/PM

Interval (min): 15

Start Time: 7:30

End Time: 18:00

Vehicle Type	
Cars	Y
Buses	Y
Trucks	Y



		DIR	1	2	3	13	4	5	6	14	7	8	9	15	10	11	12	16				
From	To	VEHICLE CLASS																				
7:30:00 AM	7:45:00 AM	Cars	21	26	22	0	32	79	9	0	28	51	24	0	21	74	15	0	402			
		Buses	0	1	3	0	7	7	0	0	1	3	1	0	3	4	3	0	33			
		Trucks	0	0	1	0	0	4	0	0	0	0	0	0	0	3	3	0	11	446		
7:45:00 AM	8:00:00 AM	Cars	27	35	23	0	26	90	9	0	27	39	10	0	29	81	13	0	409			
		Buses	1	3	1	0	3	3	1	0	0	3	0	0	0	4	1	0	20			
		Trucks	1	2	0	0	3	4	1	0	0	2	1	0	1	3	0	0	18	447		
8:00:00 AM	8:15:00 AM	Cars	30	28	22	0	43	89	18	0	25	10	12	0	27	73	10	0	387			
		Buses	4	4	2	0	0	2	1	0	0	1	1	0	0	2	0	0	17			
		Trucks	3	0	1	0	1	3	0	0	0	1	0	0	3	5	7	0	24	428		
8:15:00 AM	8:30:00 AM	Cars	17	29	25	0	32	94	6	0	18	34	12	0	28	82	11	0	388			
		Buses	0	2	7	0	1	3	1	0	2	3	0	0	1	4	2	0	26			
		Trucks	1	0	0	0	1	3	0	0	2	0	0	0	0	5	0	0	12	426	1747	
8:30:00 AM	8:45:00 AM	Cars	26	32	24	0	21	92	11	0	20	47	9	0	19	68	16	0	385			
		Buses	1	0	2	0	2	3	1	0	0	0	0	0	1	1	0	0	11			
		Trucks	0	2	1	0	0	2	0	0	0	0	0	0	1	1	1	0	8	404	1705	
8:45:00 AM	9:00:00 AM	Lights	31	50	26	0	24	100	13	0	27	26	10	0	35	96	14	0	452			
		Buses	1	1	0	0	0	1	1	0	0	0	3	0	0	1	0	0	8			
		Trucks	2	0	1	0	1	4	2	0	0	1	2	0	3	4	1	0	21	481	1739	0.90
9:00:00 AM	9:15:00 AM	Cars	35	29	24	0	32	94	12	0	20	28	7	0	22	99	10	0	412			
		Buses	0	1	1	0	0	1	0	0	1	0	0	0	0	2	0	0	6			
		Trucks	1	0	0	0	1	4	0	0	1	0	1	0	1	1	0	0	10	428	1739	
9:15:00 AM	9:30:00 AM	Cars	40	23	16	0	33	81	11	0	17	21	10	0	16	74	13	0	355			
		Buses	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2			
		Trucks	1	0	1	0	0	5	0	0	0	3	0	0	0	0	2	0	12	369	1682	

8:00-9:00	SBLT	SBST	SBRT	EBLT	EBST	EBRT	NBLT	NBST	NBRT	WBLT	WBST	WBRT	Totals
Cars	104	139	97	120	375	48	90	117	43	109	319	51	1612
Buses	6	7	11	3	9	4	2	4	4	2	8	2	62
Trucks	6	2	3	3	12	2	2	2	2	7	15	9	65
Totals	116	148	111	126	396	54	94	123	49	118	342	62	1739
% Trucks	10%	6%	13%	5%	5%	11%	4%	5%	12%	8%	7%	18%	7%
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90

Location : Lafayette Ave & Hemion Rd

Location 1 (N/S): Hemion Rd/Campbell Ave

Location 2 (E/W): Lafayette Ave

Collect Date: 5/7/19

Period: AM/MD/PM

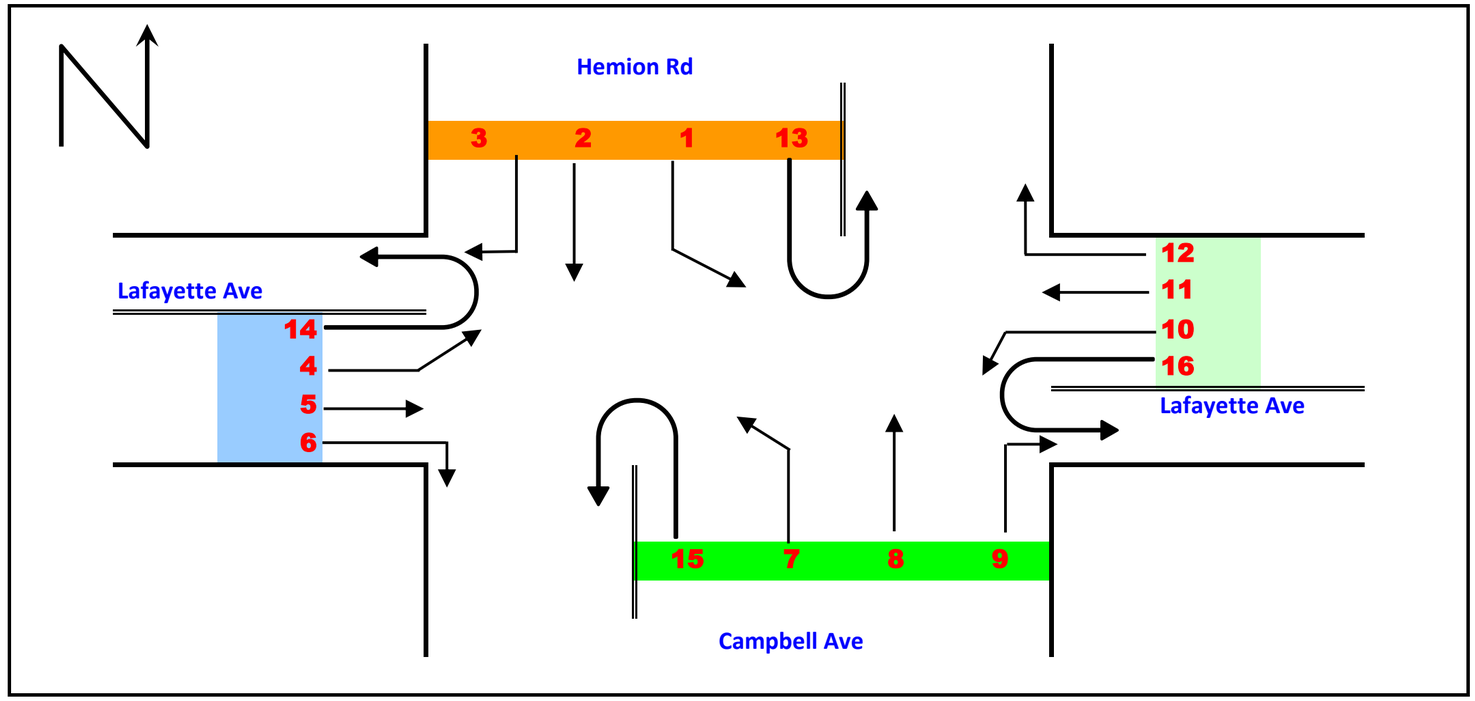
Interval (min): 15

Start Time: 7:30

End Time: 18:00

Vehicle Type

Cars	Y
Buses	Y
Trucks	Y



		DIR	1	2	3	13	4	5	6	14	7	8	9	15	10	11	12	16				
From	To	VEHICLE CLASS																				
4:00:00 PM	4:15:00 PM	Cars	46	35	39	0	43	110	19	0	43	35	15	0	12	99	30	0	526			
		Buses	0	1	1	0	2	2	1	0	2	3	1	0	0	1	0	0	14			
		Trucks	1	0	0	0	1	2	0	0	0	1	1	0	0	2	0	0	8	548		
4:15:00 PM	4:30:00 PM	Cars	25	34	30	0	38	107	19	0	34	27	17	0	26	90	21	0	468			
		Buses	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3			
		Trucks	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	5	476		
4:30:00 PM	4:45:00 PM	Cars	28	28	26	0	45	126	21	0	32	41	17	0	17	128	24	0	533			
		Buses	0	1	0	0	0	3	0	0	0	0	0	0	0	1	0	0	5			
		Trucks	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	3	541		
4:45:00 PM	5:00:00 PM	Cars	17	30	36	0	43	113	16	0	28	39	10	0	19	100	26	0	477			
		Buses	0	2	0	0	0	2	0	0	0	1	1	0	1	1	0	0	8			
		Trucks	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	486	2051	
5:00:00 PM	5:15:00 PM	Cars	33	47	37	1	42	113	29	0	35	44	21	0	21	118	41	0	582			
		Buses	0	0	0	0	0	1	0	0	1	0	0	0	1	2	0	0	5			
		Trucks	0	0	0	0	0	2	0	0	0	0	0	0	1	1	0	0	4	591	2094	
5:15:00 PM	5:30:00 PM	Cars	31	31	27	0	28	115	18	0	38	31	12	0	17	134	20	0	502			
		Buses	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	3			
		Trucks	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	507	2125	0.90
5:30:00 PM	5:45:00 PM	Cars	22	45	34	0	46	107	23	0	32	30	7	0	17	109	25	0	497			
		Buses	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2			
		Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	501	2085	
5:45:00 PM	6:00:00 PM	Cars	25	43	21	0	40	111	17	0	27	37	11	0	19	119	26	0	496			
		Buses	1	0	0	0	0	3	0	0	1	1	0	0	1	2	0	0	9			
		Trucks	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	4	509	2108	

4:30-5:30	SBLT	SBST	SBRT	EBLT	EBST	EBRT	NBLT	NBST	NBRT	WBLT	WBST	WBRT	Totals
Cars	109	136	126	158	467	84	133	155	60	74	480	111	2093
Buses	0	3	0	0	6	1	1	1	2	2	5	0	21
Trucks	0	0	0	0	4	0	0	1	0	1	4	0	10
Totals	109	139	126	158	477	85	134	157	62	77	489	111	2124
% Trucks	0%	2%	0%	0%	2%	1%	1%	1%	3%	4%	2%	0%	1%
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90

Location : Airmont Rd/Rella Drive @ Montebello Rd

Location 1 (N/S): Montebello Rd/Rella Blvd

Location 2 (E/W): Airmont Rd.

Collect Date: 10/18/18

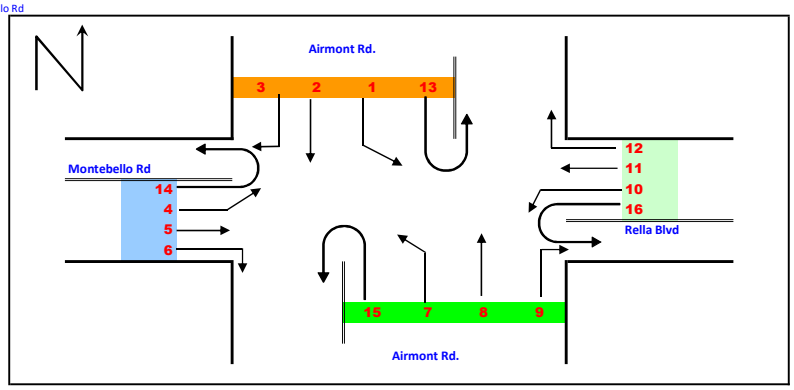
Period: AM

Interval (min): 15

Start Time: 7:00

End Time: 9:00

Vehicle Type	
Auto	Y
Bus	Y
Truck	Y

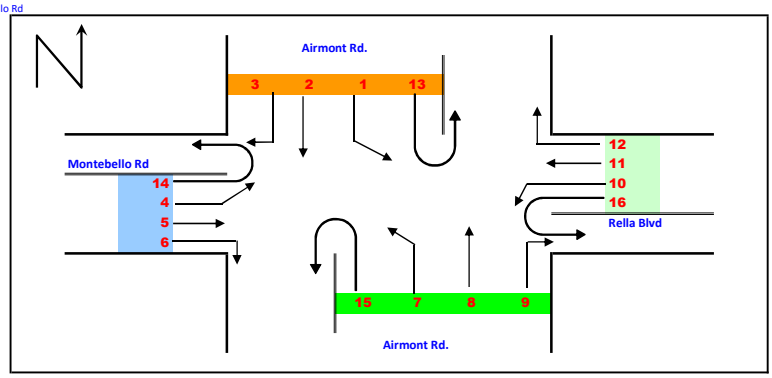


From	To	DIR	3	2	1	13	12	11	10	16	9	8	7	15	6	5	4	14				
		VEHICLE CLASS																				
7:00:00 AM	7:15:00 AM	Auto	7	92	1	0	0	1	1	0	11	93	60	0	53	4	9	0	332			
		Bus	0	3	0	0	0	0	0	0	0	2	3	0	7	0	1	0	16			
		Truck	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	351		
7:15:00 AM	7:30:00 AM	Auto	7	83	3	0	1	0	2	0	23	99	37	0	69	3	10	0	337			
		Bus	2	5	0	0	1	0	0	0	0	2	1	0	3	1	1	0	16			
		Truck	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	5	358		
7:30:00 AM	7:45:00 AM	Auto	11	114	1	0	0	0	0	0	26	132	34	0	61	4	9	0	392			
		Bus	1	5	0	0	0	0	0	0	0	2	2	0	0	0	3	0	13			
		Truck	1	4	1	0	0	0	0	0	0	2	0	0	0	0	0	0	8	413		
7:45:00 AM	8:00:00 AM	Auto	17	117	2	0	1	0	0	0	53	159	32	0	101	14	20	0	516			
		Bus	1	5	0	0	0	0	0	0	0	0	0	0	1	0	5	0	12			
		Truck	2	3	0	0	1	0	0	0	0	5	1	0	0	0	0	0	12	540	1662	
8:00:00 AM	8:15:00 AM	Auto	6	111	3	0	0	0	0	0	47	99	28	0	65	4	12	0	375			
		Bus	1	2	0	0	0	0	0	0	0	1	2	0	0	0	0	0	6			
		Truck	0	4	0	0	0	0	0	0	0	7	0	0	3	0	0	0	14	395	1706	
8:15:00 AM	8:30:00 AM	Auto	11	115	3	0	1	1	2	0	37	96	45	0	58	5	17	0	391			
		Bus	2	1	0	0	0	0	0	0	0	3	0	0	0	0	1	0	7			
		Truck	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	5	403	1751	
8:30:00 AM	8:45:00 AM	Auto	15	139	9	0	1	0	0	0	33	127	31	0	73	6	11	0	445			
		Bus	1	4	0	0	0	0	0	0	0	3	0	0	2	0	0	0	10			
		Truck	0	2	0	0	0	0	0	0	1	2	0	0	0	0	0	0	5	460	1798	
8:45:00 AM	9:00:00 AM	Auto	10	140	14	0	2	0	2	0	39	161	44	0	60	10	12	0	494			
		Bus	0	3	0	0	0	0	0	0	0	1	0	0	1	0	0	0	5			
		Truck	0	3	0	0	0	0	0	0	0	1	0	0	1	0	0	0	5	504	1762	0.87
Total			95	958	37	0	8	2	7	0	270	1005	321	0	558	51	112	0	3424			

8:00-9:00	SBRT	SBST	SBLT	WBRT	WBST	WBLT	NBRT	NBST	NBLT	EBRT	EBST	EBLT	Totals
Auto	42	505	29	4	1	4	156	483	148	256	25	52	1705
Bus	4	10	0	0	0	0	0	8	2	3	0	1	28
Truck	0	9	0	0	0	0	1	14	0	4	0	1	29
Totals	46	524	29	4	1	4	157	505	150	263	25	54	1762
% Trucks	9%	4%	0%	0%	0%	0%	1%	4%	1%	3%	0%	4%	3%
PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87

Location : Airmont Rd/Rella Drive @ Montebello Rd
Location 1 (N/S): Montebello Rd/Rella Blvd
Location 2 (E/W): Airmont Rd.
Collect Date: 10/18/2018
Period: PM
Interval (min): 15
Start Time: 16:00
End Time: 18:00

Vehicle Type	
Auto	Y
Bus	Y
Truck	Y



From	To	DIR / VEHICLE CLASS	3	2	1	13	12	11	10	16	9	8	7	15	6	5	4	14				
4:00:00 PM	4:15:00 PM	Auto	10	137	2	0	9	4	35	0	7	146	72	0	59	3	21	0	505			
		Bus	1	1	0	0	0	0	0	0	0	1	3	0	1	0	2	0	9			
		Truck	0	2	0	0	0	0	0	0	0	2	0	0	1	0	0	0	5	519		
4:15:00 PM	4:30:00 PM	Auto	22	175	4	0	8	4	17	0	4	140	75	0	52	1	17	0	519			
		Bus	1	2	0	0	0	0	0	0	0	2	2	0	3	0	0	0	10			
		Truck	0	7	1	0	0	0	0	0	0	5	1	0	3	0	0	0	17	546		
4:30:00 PM	4:45:00 PM	Auto	18	172	1	0	8	8	35	0	5	154	75	0	53	0	19	0	548			
		Bus	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3			
		Truck	0	2	0	0	0	0	1	0	0	4	0	0	1	1	0	0	9	560		
4:45:00 PM	5:00:00 PM	Auto	15	144	1	0	10	8	23	0	4	165	66	0	50	0	18	0	504			
		Bus	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2			
		Truck	0	3	0	0	0	0	0	0	0	2	0	0	1	0	0	0	6	512	2137	
5:00:00 PM	5:15:00 PM	Auto	16	146	1	0	14	11	52	0	1	149	69	0	40	0	24	0	523			
		Bus	1	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7			
		Truck	0	5	0	0	0	0	1	0	0	1	0	0	1	0	1	0	9	539	2157	
5:15:00 PM	5:30:00 PM	Auto	18	173	6	0	8	8	26	0	1	194	79	0	51	2	19	0	585			
		Bus	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2			
		Truck	1	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	4	591	2202	
5:30:00 PM	5:45:00 PM	Auto	26	169	4	0	25	3	24	0	2	200	72	0	59	0	25	0	609			
		Bus	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
		Truck	1	1	0	0	0	0	0	0	0	3	0	0	2	0	0	0	7	617	2259	0.92
5:45:00 PM	6:00:00 PM	Auto	20	137	1	0	8	5	21	0	1	183	63	0	54	3	19	0	515			
		Bus	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2			
		Truck	0	1	0	0	0	0	0	0	0	2	0	0	0	0	1	0	4	521	2268	
Total			151	1286	21	0	90	51	236	0	25	1358	579	0	432	10	166	0	4405			

4:45-5:45	SBRT	SBST	SBLT		WBRT	WBST	WBLT		NBRT	NBST	NBLT		EBRT	EBST	EBLT		Totals
Auto	75	632	12		57	30	125		8	708	286		200	2	86		2221
Bus	1	7	0		0	0	0		0	2	1		1	0	0		12
Truck	2	9	0		0	0	2		0	7	1		4	0	1		26
Totals	78	648	12		57	30	127		8	717	288		205	2	87		2259
% Trucks	4%	2%	0%		0%	0%	2%		0%	1%	1%		2%	0%	1%		2%
PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92

R-70
Signal #

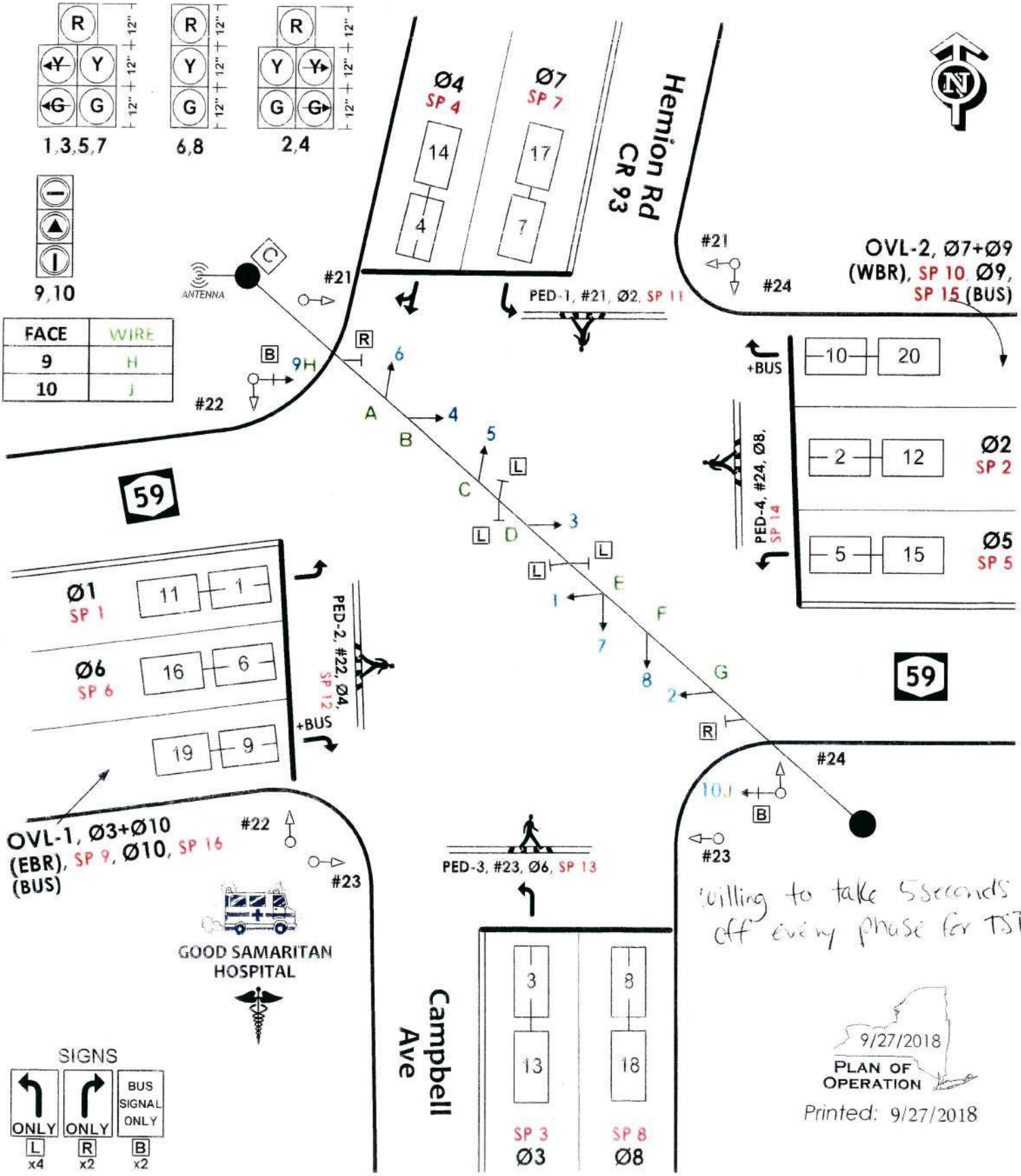
STATE OF NEW YORK · DEPARTMENT OF TRANSPORTATION
TRAFFIC AND SAFETY DIVISION
in the Town of **RAMAPO**

Signal: **R-70**
Contract: D263528
PIN: 8823.50
File: 39.16-59

PROPOSED 2018 OPERATION

FACES

FACE	WIRE
9	H
10	J



willing to take 5 seconds off every phase for TSP

SIGNS

9/27/2018
PLAN OF
OPERATION

Printed: 9/27/2018

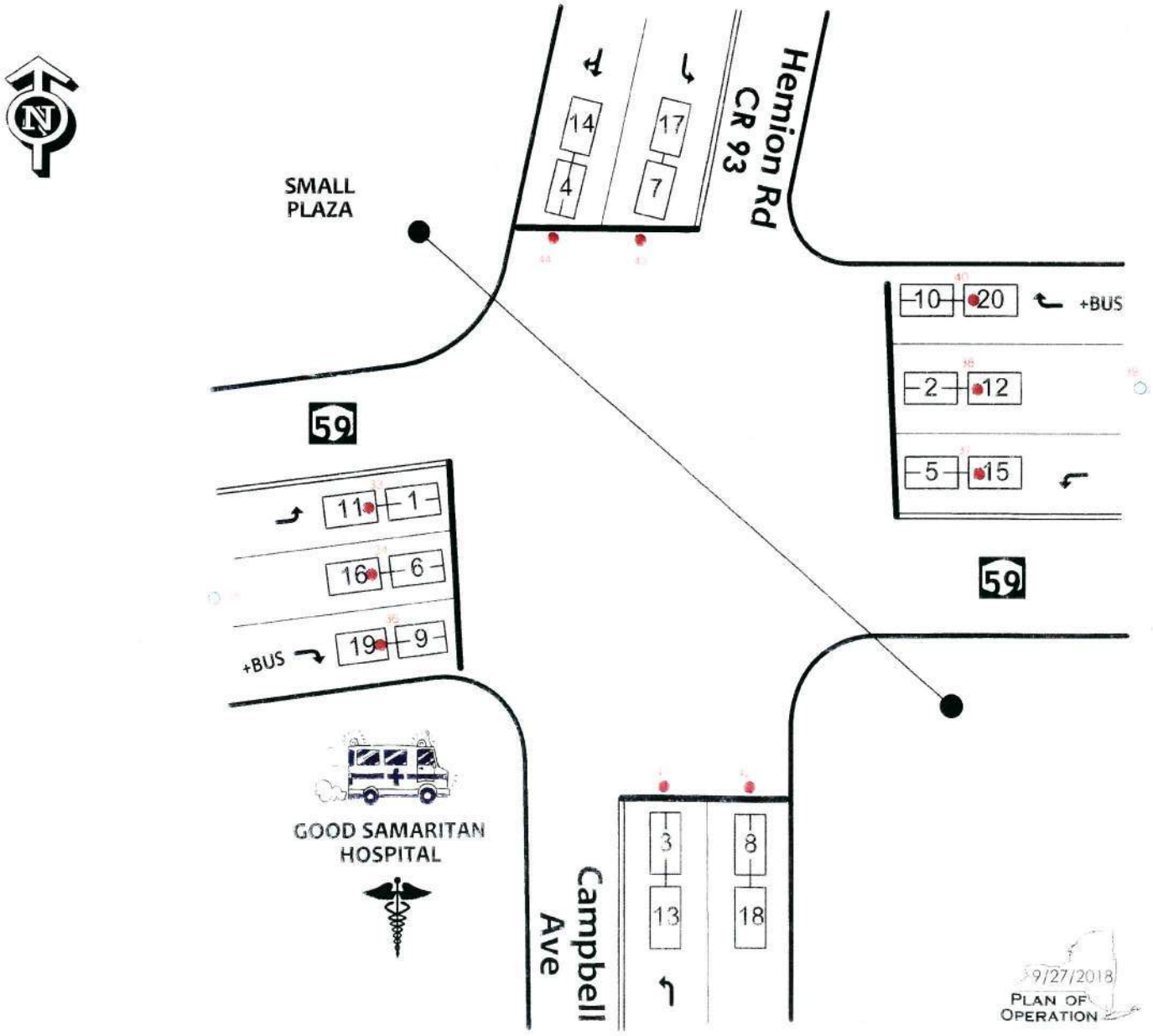
R-70
Signal #

PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION
ADDITIONAL INFORMATION FOR WIRELESS DETECTORS (PODS)

NY-59 AT HEMION RD./CAMPBELL AVE.
Town of Ramapo
Rockland County

Signal: **R-70**
Contract: D263528
PIN: 8823.50
File: 39.16-59

FUNCTION	DETECTOR NUMBER	DET. TYPE	DET. AN OVER	IO MAP	FCN	REMARKS
PHASE 1	33	WIRELESS		SDLC	33	SYSTEM DETECTOR, EBL
PHASE 6	34	WIRELESS		SDLC	34	SYSTEM DETECTOR, EBT
PHASE 6	35	WIRELESS		SDLC	35	SYSTEM DETECTOR, EBT ADVANCE
PHASE 6	36	WIRELESS		SDLC	36	SYSTEM DETECTOR, EBR
PHASE 5	37	WIRELESS		SDLC	37	SYSTEM DETECTOR, WBL
PHASE 2	38	WIRELESS		SDLC	38	SYSTEM DETECTOR, WBT
PHASE 2	39	WIRELESS		SDLC	39	SYSTEM DETECTOR, WBT ADVANCE
PHASE 2	40	WIRELESS		SDLC	40	SYSTEM DETECTOR, WBR
PHASE 3	41	WIRELESS		SDLC	41	SYSTEM DETECTOR, NBL
PHASE 8	42	WIRELESS		SDLC	42	SYSTEM DETECTOR, NBT
PHASE 7	43	WIRELESS		SDLC	43	SYSTEM DETECTOR, SBL
PHASE 4	44	WIRELESS		SDLC	44	SYSTEM DETECTOR, SBT



9/27/2018
PLAN OF OPERATION

Printed: 9/27/2018

R-70

NYSDOT- Region 8

Intersection Timing Sheet

Station ID [6.1]

Intersection : 15070 - v76 RTE 59 @ CAMPBELL RD _HEMION RD (Upload File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode: USER		5/28/2019 1:17:36 PM	

Communication [6.5]

IP Address	Subnet Mask	Gateway	Port
192.168. .100	255.255.255.	192.168. .1	5001

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk		7		7		7		7								
Ped Clearance		18		16		14		17								
Min Green	3	10	3	5	3	10	3	5	3	3						
Gap Ext	2	2	2	2	2	2	2	2	2	2						
Max1	15	40	15	20	15	40	15	20	15	15						
Max2	15	40	15	40	15	40	15	40	15	15						
Yellow Clr	4	4	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Auto Flash Entry																
Auto Flash Exit																
Non-Actuated 1																
Non-Actuated 2																
Concurrent Ps	1	1	1	1	2	2	2	2	1	2						

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON						
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

R-70

Phase Options Plus [1.1.3]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Reservice																
Ped Clr Thru Yellow																
Skip Red-NoCall																
Red Rest																
Max 2																
Max Inhibit																
Ped Delay																
Red Rest On Gap																
Conflicting P																
Green Ped Delay Time																
Omit Yel																
Ped Out																
Start Yel																
Redirect P Calls From 1																
Redirect P Calls To 1																
Redirect P Calls From 2																
Redirect P Calls To 2																
Redirect P Calls From 3																
Redirect P Calls To 3																
Redirect P Calls From 4																
Redirect P Calls To 4																

Channel Assignment [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	1	2	2	4	6	8	9	10								
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	PED	PED	PED	PED	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Flash	DRK	YEL	DRK	RED	DRK	YEL	DRK	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

I/O Channel Plus [1.8.4]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	10	21	22	23	24
Flash Red																								
Flash Yellow																								
Flash Green																								
Inh Red Flash in Preempt																								
Color Flash Rate																								
Override Type																								
Olap Ovrd																								

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifer Phases	Type	Green	Yellow	Red
Overlap 1	3 10		NORMAL		4	2
Overlap 2	7 9		NORMAL		4	2
Overlap 3			NORMAL		4	2
Overlap 4			NORMAL		4	2
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5
Overlap 9			NORMAL		3.5	1.5
Overlap 10			NORMAL		3.5	1.5
Overlap 11			NORMAL		3.5	1.5
Overlap 12			NORMAL		3.5	1.5
Overlap 13			NORMAL		3.5	1.5
Overlap 14			NORMAL		3.5	1.5
Overlap 15			NORMAL		3.5	1.5
Overlap 16			NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases	Conflicting Overlaps	Conflicting Peds
Overlap 1			
Overlap 2			
Overlap 3			
Overlap 4			
Overlap 5			
Overlap 6			
Overlap 7			
Overlap 8			
Overlap 9			
Overlap 10			
Overlap 11			
Overlap 12			
Overlap 13			
Overlap 14			

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Overlap 15	
Overlap 16	

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Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4	9			
Ring 2	5	6	7	8	10			
Ring 3								
Ring 4								

Phase Startup, Concur [1.1.4]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Startup	RED	GREEN	RED	RED	RED	GREEN	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Concur 1	5	5	7	7	1	1	3	3	10	9						
Concur 2	6	6	8	8	2	2	4	4								
Concur 3																
Concur 4																
Concur 5																
Concur 6																
Concur 7																
Concur 8																

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON	ON	ON	ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell	2	2	2	2	2	2
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						
Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1						
Exit 2						
Exit 3						
Exit 4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	RAIL	RAIL	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt	ON	ON	ON	ON	ON	ON
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	DWELL	DWELL	DWELL	DWELL	DWELL	DWELL
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
DwellCyc Over 1						
DwellCyc Over 2						
DwellCyc Over 3						
DwellCyc Over 4						
DwellCyc Over 5						
DwellCyc Over 6						
DwellCyc Over 7						
DwellCyc Over 8						
DwellCyc Over 9						
DwellCyc Over 10						
DwellCyc Over 11						
DwellCyc Over 12						
Ped Clear						
Yellow						
Red						
Return Max						

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Detector, Vehicle Parameters [5.1][5.2]

1-16

Detector #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Volume																
Occupancy																
Yellow Lock																
Red Lock																
Extend	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Added Initial	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Queue																
Call	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Call Phase	1	2	3	4	5	6	7	8	6	2	1	2	3	4	5	6
Switch Phase																
Delay Time																
Extend Time																
Queue Limit																
No Activity																
Max Presence	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Erratic Counts	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Fail Time	10	27	10	13	10	27	10	13	27	27	10	27	10	13	10	27

17-32

Detector #	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Volume																
Occupancy																
Yellow Lock																
Red Lock																
Extend	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Added Initial	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Queue																
Call	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Call Phase	7	8	6	2											9	10
Switch Phase																
Delay Time																
Extend Time																
Queue Limit																
No Activity																
Max Presence	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Erratic Counts	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Fail Time	10	13	27	27												

33-48

Detector #	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Volume																
Occupancy																
Yellow Lock																
Red Lock																
Extend	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Added Initial	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Queue																
Call	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Call Phase																
Switch Phase																
Delay Time																
Extend Time																
Queue Limit																
No Activity																
Max Presence	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Erratic Counts	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Fail Time																

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49-64

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Volume																
Occupancy																
Yellow Lock																
Red Lock																
Extend	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Added Initial	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Queue																
Call	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Call Phase																
Switch Phase																
Delay Time																
Extend Time																
Queue Limit																
No Activity																
Max Presence	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Erratic Counts	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Fail Time																

Detector, Vehicle Parameters+ [5.3]

1-16

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green Occupancy																
Yellow Occupancy																
Red Occupancy																
External Mode	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM
Delay Phase 1																
Delay Phase 2																
Source																

17-32

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Green Occupancy																
Yellow Occupancy																
Red Occupancy																
External Mode	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM
Delay Phase 1																
Delay Phase 2																
Source																

33-48

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Green Occupancy																
Yellow Occupancy																
Red Occupancy																
External Mode	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM
Delay Phase 1																
Delay Phase 2																
Source																

49-64

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Green Occupancy																
Yellow Occupancy																
Red Occupancy																
External Mode	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM
Delay Phase 1																
Delay Phase 2																
Source																

Detector, Ped Detectors 1-16 [5.4]

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phase	2	4	6	8												
No Activity																
Max Presence	15	15	15	15	15	15	15	15								
Erratic Cnt																

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Detector Alternate Program 1, Vehicle Parameters [5.5.1]

Detector #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Volume																
Occupancy																
Yellow Lock																
Red Lock																
Extend																
Added Initial																
Queue																
Call																
Call Phase																
Switch Phase																
Delay Time																
Extend Time																
Queue Limit																
No Activity																
Max Presence																
Erratic Cnt																
Fail Time																
Green Occupancy																
Yellow Occupancy																
Red Occupancy																
Ext Mode	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM
Delay Phase 1																
Delay Phase 2																
Source																
Det Number																

Detector Alternate Program 2, Vehicle Parameters [5.5.2]

Detector #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Volume																
Occupancy																
Yellow Lock																
Red Lock																
Extend																
Added Initial																
Queue																
Call																
Call Phase																
Switch Phase																
Delay Time																
Extend Time																
Queue Limit																
No Activity																
Max Presence																
Erratic Cnt																
Fail Time																
Green Occupancy																
Yellow Occupancy																
Red Occupancy																
Ext Mode	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM	NORM
Delay Phase 1																
Delay Phase 2																
Source																
Det Number																

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Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.2]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 1, Phase Options [1.1.6.2.1]

Column	Non Act1	Lock Call	Soft Recall	Dual Entry	Sim Gap Enb	Guar Pass	RIW	Cond Service	Reservice	Red Rest	Max 2	Ped Delay	Conf Phs1	Conf Phs1	Assign Phase
1		ON			ON										
2		ON			ON										
3		ON			ON										
4		ON			ON										
5		ON			ON										
6		ON			ON										
7		ON			ON										
8		ON			ON										

Alternate Phase Program 2, Phase Options [1.1.6.2.2]

Column	Non Act1	Lock Call	Soft Recall	Dual Entry	Sim Gap Enb	Guar Pass	RIW	Cond Service	Reservice	Red Rest	Max 2	Ped Delay	Conf Phs1	Conf Phs1	Assign Phase
1		ON			ON										
2		ON			ON										
3		ON			ON										
4		ON			ON										
5		ON			ON										
6		ON			ON										
7		ON			ON										
8		ON			ON										

Alternate Phase Program 3, Phase Options [1.1.6.2.3]

Column	Non Act1	Lock Call	Soft Recall	Dual Entry	Sim Gap Enb	Guar Pass	RIW	Cond Service	Reservice	Red Rest	Max 2	Ped Delay	Conf Phs1	Conf Phs1	Assign Phase
1		ON			ON										
2		ON			ON										
3		ON			ON										
4		ON			ON										
5		ON			ON										
6		ON			ON										
7		ON			ON										
8		ON			ON										

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1													
2													
3													
4													
5													
6													
7													
8													

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1													
2													
3													
4													
5													
6													
7													
8													

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Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

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Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40	15	20	15	40	15	20	15	15						
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

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Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40	15	40	15	40	15	40	15	15						
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord Phase																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD
Coord Phase																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD
Coord Phase																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD
Coord Phase																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD
Coord Phase																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD
Coord Phase																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD
Coord Phase																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD	NVD
Coord Phase																

Coordination, Pattern 1-16 [2.4]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time																
Offset Time																
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Coordination, Pattern 17-32 [2.4]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number	17	18	19	20	21	22	23	24	25							
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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Coordination, Pattern+ 1-8 [2.5]

Pattern	1	2	3	4	5	6	7	8
Short	12	12	12	12	12	12	12	12
Long	22	22	22	22	22	22	22	22
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table								
Ph Time Table								
Det Grp								
Call Inh								
Olp Off 1								
Olp Off 2								
Olp Off 3								
Olp Off 4								
Olp Off 5								
Olp Off 6								
Olp Off 7								
Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

Coordination, Pattern+ 9-16 [2.5]

Pattern	9	10	11	12	13	14	15	16
Short	12	12	12	12	12	12	12	12
Long	22	22	22	22	22	22	22	22
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table								
Ph Time Table								
Det Grp								
Call Inh								
Olp Off 1								
Olp Off 2								
Olp Off 3								
Olp Off 4								
Olp Off 5								
Olp Off 6								
Olp Off 7								
Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

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Coordination, Pattern+ 17 - 24 [2.5]

Pattern	17	18	19	20	21	22	23	24
Short	12	12	12	12	12	12	12	12
Long	22	22	22	22	22	22	22	22
Dwell								
No Short P 1								
No Short P 2								
No Short P 3								
No Short P 4								
Early Yield								
Offset	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN	ENDGRN
CNA								
Max 2								
Float								
Min Veh Perm								
Min Ped Perm								
Percentage								
MI								
Ret Hold								
ASC								
Ph Opt Table								
Ph Time Table								
Det Grp								
Call Inh								
Olp Off 1								
Olp Off 2								
Olp Off 3								
Olp Off 4								
Olp Off 5								
Olp Off 6								
Olp Off 7								
Olp Off 8								
Dia Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT
Force Mode	DFT	DFT	DFT	DFT	DFT	DFT	DFT	DFT

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TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	14	16											
Minute		30	30													
Action	24	25	24	25	24											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2																																																	1
3																																																	1
4																																																	1
5																																																	1
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20																																																	1
21																																																	1
22																																																	1
23																																																	1
24																																																	1

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[v61] TS2 IO Map – Input Function Table

Func	Input	Func	Input	Func	Input	Func	Input	Func	Input
0	Unused	50	Veh Call 50	100	Veh Chng 36	150	Ped Omit 6	200	Pre 3 In
1	Veh Call 1	51	Veh Call 51	101	Veh Chng 37	151	Ped Omit 7	201	Pre 4 In
2	Veh Call 2	52	Veh Call 52	102	Veh Chng 38	152	Ped Omit 8	202	Pre 5 In
3	Veh Call 3	53	Veh Call 53	103	Veh Chng 39	153	Ph Omit 1	203	Pre 6 In
4	Veh Call 4	54	Veh Call 54	104	Veh Chng 40	154	Ph Omit 2	204	Pre 7 In
5	Veh Call 5	55	Veh Call 55	105	Veh Chng 41	155	Ph Omit 3	205	Pre 8 In
6	Veh Call 6	56	Veh Call 56	106	Veh Chng 42	156	Ph Omit 4	206	CMU/MMU Flash In
7	Veh Call 7	57	Veh Call 57	107	Veh Chng 43	157	Ph Omit 5	207	33x Composite Stop Time
8	Veh Call 8	58	Veh Call 58	108	Veh Chng 44	158	Ph Omit 6	208	Local Flash In
9	Veh Call 9	59	Veh Call 59	109	Veh Chng 45	159	Ph Omit 7	209	TBC Online (Input)
10	Veh Call 10	60	Veh Call 60	110	Veh Chng 46	160	Ph Omit 8	210	Dim Enable
11	Veh Call 11	61	Veh Call 61	111	Veh Chng 47	161	R1 Frc Off	211	Auto Flash In
12	Veh Call 12	62	Veh Call 62	112	Veh Chng 48	162	R1 Stop Tim	212	Alt Seq A
13	Veh Call 13	63	Veh Call 63	113	Veh Chng 49	163	R1 Inh Max	213	Alt Seq B
14	Veh Call 14	64	Veh Call 64	114	Veh Chng 50	164	R1 Red Rest	214	Alt Seq C
15	Veh Call 15	65	Veh Chng 1	115	Veh Chng 51	165	R1 PedRecyc	215	Alt Seq D
16	Veh Call 16	66	Veh Chng 2	116	Veh Chng 52	166	R1 Max II	216	Plan A
17	Veh Call 17	67	Veh Chng 3	117	Veh Chng 53	167	R1 OmtRdClr	217	Plan B
18	Veh Call 18	68	Veh Chng 4	118	Veh Chng 54	168	Non-Act I	218	Plan C
19	Veh Call 19	69	Veh Chng 5	119	Veh Chng 55	169	R2 Frc Off	219	Plan D
20	Veh Call 20	70	Veh Chng 6	120	Veh Chng 56	170	R2 Stop Tim	220	Addr Bit 0
21	Veh Call 21	71	Veh Chng 7	121	Veh Chng 57	171	R2 Inh Max	221	Addr Bit 1
22	Veh Call 22	72	Veh Chng 8	122	Veh Chng 58	172	R2 Red Rest	222	Addr Bit 2
23	Veh Call 23	73	Veh Chng 9	123	Veh Chng 59	173	R2 PedRecyc	223	Addr Bit 3
24	Veh Call 24	74	Veh Chng 10	124	Veh Chng 60	174	R2 Max II	224	Addr Bit 4
25	Veh Call 25	75	Veh Chng 11	125	Veh Chng 61	175	R2 OmtRdClr	225	Offset 1
26	Veh Call 26	76	Veh Chng 12	126	Veh Chng 62	176	Non-Act II	226	Offset 2
27	Veh Call 27	77	Veh Chng 13	127	Veh Chng 63	177	Ext Start	227	Offset 3
28	Veh Call 28	78	Veh Chng 14	128	Veh Chng 64	178	Int Advance	228	33x Flash Sense
29	Veh Call 29	79	Veh Chng 15	129	Ped Call 1	179	Door Open	229	33x CMU Stop
30	Veh Call 30	80	Veh Chng 16	130	Ped Call 2	180	Min Recall	230	GateMode0
31	Veh Call 31	81	Veh Chng 17	131	Ped Call 3	181	ManCtrlEnbl	231	GateMode1
32	Veh Call 32	82	Veh Chng 18	132	Ped Call 4	182	Mode Bit A	232	GateMode2
33	Veh Call 33	83	Veh Chng 19	133	Ped Call 5	183	Mode Bit B	233	GateMode3
34	Veh Call 34	84	Veh Chng 20	134	Ped Call 6	184	Mode Bit C	234	GateOpen1
35	Veh Call 35	85	Veh Chng 21	135	Ped Call 7	185	Test A	235	GateClose1
36	Veh Call 36	86	Veh Chng 22	136	Ped Call 8	186	Test B	236	GateOpen2
37	Veh Call 37	87	Veh Chng 23	137	Hold 1	187	Test C	237	GateClose2
38	Veh Call 38	88	Veh Chng 24	138	Hold 2	188	WalkRestMod	238	Reserved
39	Veh Call 39	89	Veh Chng 25	139	Hold 3	189	Unused	239	Reserved
40	Veh Call 40	90	Veh Chng 26	140	Hold 4	190	Free	240	Logic1
41	Veh Call 41	91	Veh Chng 27	141	Hold 5	191	Flash In	241	Logic2
42	Veh Call 42	92	Veh Chng 28	142	Hold 6	192	Alarm 1	242	Logic3
43	Veh Call 43	93	Veh Chng 29	143	Hold 7	193	Alarm 2	243	Logic4
44	Veh Call 44	94	Veh Chng 30	144	Hold 8	194	Alarm 3	244	Logic5
45	Veh Call 45	95	Veh Chng 31	145	Ped Omit 1	195	Alarm 4	245	Logic6
46	Veh Call 46	96	Veh Chng 32	146	Ped Omit 2	196	Alarm 5	246	Logic7
47	Veh Call 47	97	Veh Chng 33	147	Ped Omit 3	197	Alarm 6	247	Logic8
48	Veh Call 48	98	Veh Chng 34	148	Ped Omit 4	198	Pre 1 In	248	Logic9
49	Veh Call 49	99	Veh Chng 35	149	Ped Omit 5	199	Pre 2 In	249	Logic10

Func	Input
250	Reserved
251	Reserved
252	Reserved
253	Reserved
254	False
255	True

Read bank and pin from 2A Input and 2A Output maps

Codes in Input map are above

How to read 2A IO maps:
i 1-1 = input bank 1 pin 1
i 1-2 = input bank 1 pin 2
i 3-4 = input bank 3 pin 4

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[v61] TS2 IO Map – Output Function Table

Func	Output	Func	Output	Func	Output	Func	Output	Func	Output
0	Unused	50	Ch2 Green	100	R2 Status A	150	Reserved	200	IO UCF Flash
1	Ch1 Red	51	Ch3 Green	101	R2 Status B	151	Reserved	201	Preempt Int Stat Out 1
2	Ch2 Red	52	Ch4 Green	102	R2 Status C	152	Reserved	202	Preempt Int Stat Out 2
3	Ch3 Red	53	Ch5 Green	103	Special 1	153	Reserved	203	Preempt Int Stat Out 3
4	Ch4 Red	54	Ch6 Green	104	Special 2	154	Reserved	204	Preempt Int Stat Out 4
5	Ch5 Red	55	Ch7 Green	105	Special 3	155	Reserved	205	Preempt Int Stat Out 5
6	Ch6 Red	56	Ch8 Green	106	Special 4	156	Reserved	206	Preempt Int Stat Out 6
7	Ch7 Red	57	Ch9 Green	107	Special 5	157	Reserved	207	Preempt Int Stat Out 7
8	Ch8 Red	58	Ch10 Green	108	Special 6	158	Reserved	208	Reserved
9	Ch9 Red	59	Ch11 Green	109	Special 7	159	Reserved	209	Reserved
10	Ch10 Red	60	Ch12 Green	110	Special 8	160	Reserved	210	Reserved
11	Ch11 Red	61	Ch13 Green	111	Fault Mon	161	Reserved	211	Reserved
12	Ch12 Red	62	Ch14 Green	112	Voltage Mon	162	Reserved	212	Reserved
13	Ch13 Red	63	Ch15 Green	113	Flash Logic	163	Reserved	213	Reserved
14	Ch14 Red	64	Ch16 Green	114	170 Watchdog	164	Reserved	214	Reserved
15	Ch15 Red	65	Ch17 Green	115	Constant Zero	165	Reserved	215	Reserved
16	Ch16 Red	66	Ch18 Green	116	Pre Stat 1	166	Reserved	216	Reserved
17	Ch17 Red	67	Ch19 Green	117	Pre Stat 2	167	Reserved	217	Reserved
18	Ch18 Red	68	Ch20 Green	118	Pre Stat 3	168	Reserved	218	Reserved
19	Ch19 Red	69	Ch21 Green	119	Pre Stat 4	169	Reserved	219	Reserved
20	Ch20 Red	70	Ch22 Green	120	Pre Stat 5	170	Reserved	220	Reserved
21	Ch21 Red	71	Ch23 Green	121	Pre Stat 6	171	Reserved	221	Reserved
22	Ch22 Red	72	Ch24 Green	122	TBCAux/Pre1	172	Reserved	222	Reserved
23	Ch23 Red	73	Ph 1 Check	123	TBCAux/Pre2	173	Reserved	223	Reserved
24	Ch24 Red	74	Ph 2 Check	124	LdSwtchFlsh	174	Reserved	224	Reserved
25	Ch1 Yellow	75	Ph 3 Check	125	TBC Aux 1	175	Reserved	225	Reserved
26	Ch2 Yellow	76	Ph 4 Check	126	TBC Aux 2	176	Reserved	226	Reserved
27	Ch3 Yellow	77	Ph 5 Check	127	TBC Aux 3	177	Reserved	227	Reserved
28	Ch4 Yellow	78	Ph 6 Check	128	Coord Active	178	Reserved	228	Reserved
29	Ch5 Yellow	79	Ph 7 Check	129	Time plan A	179	Reserved	229	Reserved
30	Ch6 Yellow	80	Ph 8 Check	130	Time plan B	180	Reserved	230	Logic1
31	Ch7 Yellow	81	Ph 1 Next	131	Time plan C	181	Reserved	231	Logic2
32	Ch8 Yellow	82	Ph 2 Next	132	Time plan D	182	Reserved	232	Logic3
33	Ch9 Yellow	83	Ph 3 Next	133	Offset Out1	183	Reserved	233	Logic4
34	Ch10 Yellow	84	Ph 4 Next	134	Offset Out2	184	Reserved	234	Logic5
35	Ch11 Yellow	85	Ph 5 Next	135	Offset Out3	185	Reserved	235	Logic6
36	Ch12 Yellow	86	Ph 6 Next	136	Auto Flash	186	Reserved	236	Logic7
37	Ch13 Yellow	87	Ph 7 Next	137	Preempt Actv (Composite)	187	Reserved	237	Logic8
38	Ch14 Yellow	88	Ph 8 Next	138	Reserved: LiteRailVeh Warning	188	Reserved	238	Logic9
39	Ch15 Yellow	89	Phase 1 On	139	Reserved	189	Reserved	239	Logic10
40	Ch16 Yellow	90	Phase 2 On	140	Audible Ped 2	190	Reserved	240	Logic11
41	Ch17 Yellow	91	Phase 3 On	141	Audible Ped 4	191	Reserved	241	Logic12
42	Ch18 Yellow	92	Phase 4 On	142	Audible Ped 6	192	Reserved	242	Logic13
43	Ch19 Yellow	93	Phase 5 On	143	Audible Ped 8	193	Reserved	243	Logic14
44	Ch20 Yellow	94	Phase 6 On	144	Reserved	194	Reserved	244	Logic15
45	Ch21 Yellow	95	Phase 7 On	145	Reserved	195	Reserved	245	Logic16
46	Ch22 Yellow	96	Phase 8 On	146	Reserved	196	Reserved	246	Logic17
47	Ch23 Yellow	97	R1 Status A	147	Reserved	197	Reserved	247	Logic18
48	Ch24 Yellow	98	R1 Status B	148	Reserved	198	Reserved	248	Logic19
49	Ch1 Green	99	R1 Status C	149	Reserved	199	Reserved	249	Logic20

Func	Output
250	Reserved
251	Reserved
252	Reserved
253	Reserved
254	False
255	True

Read bank and pin from 2A Input and 2A Output maps

Codes in Output map are above

How to read 2A IO maps:
i 1-1 = input bank 1 pin 1
i 1-2 = input bank 1 pin 2
i 3-4 = input bank 3 pin 4

15070 - v76 RTE 59 @ CAMPBELL RD _HEMION RD
2A Output Map Table 1

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Param	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
Pin 8	51	54	57	60	114	62	15	115
Pin 7	27	30	33	36	115	38	115	115
Pin 6	3	6	9	12	63	14	115	115
Pin 5	50	53	56	59	39	61	115	115
Pin 4	26	29	32	35	31	37	115	115
Pin 3	2	5	8	11	25	13	64	115
Pin 2	49	52	55	58	34	115	16	115
Pin 1	1	4	7	10	28	115	40	115

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15070 - v76 RTE 59 @ CAMPBELL RD _HEMION RD
2A Input Map Table 1

Param	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
Pin 8	8	16	132	228	189	189	189	189
Pin 7	7	15	131	229	189	189	189	189
Pin 6	6	14	130	189	189	189	189	189
Pin 5	5	13	129	189	189	189	189	189
Pin 4	4	12	20	201	189	189	189	189
Pin 3	3	11	19	200	189	189	189	189
Pin 2	2	10	18	203	189	189	189	189
Pin 1	1	9	17	202	189	189	189	189

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15070 - v76 RTE 59 @ CAMPBELL RD _HEMION RD
TSP Splits Table 1

Param	Sp 1	Sp 2	Sp 3	Sp 4	Sp 5	Sp 6	Sp 7	Sp 8	Sp 9	Sp 10	Sp 11	Sp 12	Sp 13	Sp 14	Sp 15	Sp 16	Sp 17	Sp 18	Sp 19
Max Reduce 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strategy Number 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strategy Number 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strategy Number 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strategy Number 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Service Desired 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Service Desired 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Service Desired 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Service Desired 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Estimated Departure 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Estimated Departure 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Estimated Departure 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Estimated Departure 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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TSP Splits Table 1

Param	Sp 20	Sp 21	Sp 22	Sp 23	Sp 24	Sp 25	Sp 26	Sp 27	Sp 28	Sp 29	Sp 30	Sp 31	Sp 32
Max Reduce 1	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 2	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 3	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 4	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 5	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 6	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 7	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 8	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Reduce 9	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 10	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 11	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 12	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 13	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 14	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 15	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Reduce 16	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 1	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Extend 2	0	0	0	0	15	15	0	0	0	0	0	0	0
Max Extend 3	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Extend 4	0	0	0	0	10	15	0	0	0	0	0	0	0
Max Extend 5	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Extend 6	0	0	0	0	15	15	0	0	0	0	0	0	0
Max Extend 7	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Extend 8	0	0	0	0	10	15	0	0	0	0	0	0	0
Max Extend 9	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Extend 10	0	0	0	0	5	5	0	0	0	0	0	0	0
Max Extend 11	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 12	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 13	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 14	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 15	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Extend 16	0	0	0	0	0	0	0	0	0	0	0	0	0
Strategy Number 1	0	0	0	0	1	1	0	0	0	0	0	0	0
Strategy Number 2	0	0	0	0	2	2	0	0	0	0	0	0	0
Strategy Number 3	0	0	0	0	3	3	0	0	0	0	0	0	0
Strategy Number 4	0	0	0	0	4	4	0	0	0	0	0	0	0
Time Service Desired 1	0	0	0	0	15	15	0	0	0	0	0	0	0
Time Service Desired 2	0	0	0	0	15	15	0	0	0	0	0	0	0
Time Service Desired 3	0	0	0	0	15	15	0	0	0	0	0	0	0
Time Service Desired 4	0	0	0	0	15	15	0	0	0	0	0	0	0
Time Estimated Departure 1	0	0	0	0	15	15	0	0	0	0	0	0	0
Time Estimated Departure 2	0	0	0	0	15	15	0	0	0	0	0	0	0
Time Estimated Departure 3	0	0	0	0	15	15	0	0	0	0	0	0	0
Time Estimated Departure 4	0	0	0	0	15	15	0	0	0	0	0	0	0

mm
27.1

R-70

15070 - v76 RTE 59 @ CAMPBELL RD _HEMION RD
TSP Strategy Table 1

Param	Str 1	Str 2	Str 3	Str 4	Str 5	Str 6	Str 7	Str 8
Ph Omit 1	0	0	0	0	0	0	0	0
Ph Omit 2	0	0	0	0	0	0	0	0
Ph Omit 3	0	0	0	0	0	0	0	0
Ph Omit 4	0	0	0	0	0	0	0	0
Ph Omit 5	0	0	0	0	0	0	0	0
Ph Omit 6	0	0	0	0	0	0	0	0
Ph Omit 7	0	0	0	0	0	0	0	0
Ph Omit 8	0	0	0	0	0	0	0	0
Ph Omit 9	0	0	0	0	0	0	0	0
Ph Omit 10	0	0	0	0	0	0	0	0
Ph Omit 11	0	0	0	0	0	0	0	0
Ph Omit 12	0	0	0	0	0	0	0	0
Ph Omit 13	0	0	0	0	0	0	0	0
Ph Omit 14	0	0	0	0	0	0	0	0
Ph Omit 15	0	0	0	0	0	0	0	0
Ph Omit 16	0	0	0	0	0	0	0	0
Ped Omit 1	0	0	0	0	0	0	0	0
Ped Omit 2	0	0	0	0	0	0	0	0
Ped Omit 3	0	0	0	0	0	0	0	0
Ped Omit 4	0	0	0	0	0	0	0	0
Ped Omit 5	0	0	0	0	0	0	0	0
Ped Omit 6	0	0	0	0	0	0	0	0
Ped Omit 7	0	0	0	0	0	0	0	0
Ped Omit 8	0	0	0	0	0	0	0	0
Ped Omit 9	0	0	0	0	0	0	0	0
Ped Omit 10	0	0	0	0	0	0	0	0
Ped Omit 11	0	0	0	0	0	0	0	0
Ped Omit 12	0	0	0	0	0	0	0	0
Service Ph 1	6	2	8	4	0	0	0	0
Ped Omit 13	0	0	0	0	0	0	0	0
Service Ph 2	0	0	0	0	0	0	0	0
Ped Omit 14	0	0	0	0	0	0	0	0
Service Ph 3	0	0	0	0	0	0	0	0
Ped Omit 15	0	0	0	0	0	0	0	0
Service Ph 4	0	0	0	0	0	0	0	0
Ped Omit 16	0	0	0	0	0	0	0	0

mm 29.5

15070 - v76 RTE 59 @ CAMPBELL RD _HEMION RD
IO Logic Table 1

R-70

IO Logic	Result	Src 1	Src 2	Src 3	Operator 1 Function	Operand 1 Result	Operand 1 IO	Operand 1 Invert	Operator 2 Function	Operand 2 IO
IO Logic 1	31	0	0	0	----	I	I	!	----	O
IO Logic 2	32	0	0	0	----	I	I	!	----	O
IO Logic 3	0	0	0	0	----	I	I	-	----	I
IO Logic 4	0	0	0	0	----	I	I	-	----	I
IO Logic 5	0	0	0	0	----	I	I	-	----	I
IO Logic 6	0	0	0	0	----	I	I	-	----	I
IO Logic 7	0	0	0	0	----	I	I	-	----	I
IO Logic 8	0	0	0	0	----	I	I	-	----	I
IO Logic 9	0	0	0	0	----	I	I	-	----	I
IO Logic 10	0	0	0	0	----	I	I	-	----	I
IO Logic 11	0	0	0	0	----	I	I	-	----	I
IO Logic 12	0	0	0	0	----	I	I	-	----	I
IO Logic 13	0	0	0	0	----	I	I	-	----	I
IO Logic 14	0	0	0	0	----	I	I	-	----	I
IO Logic 15	0	0	0	0	----	I	I	-	----	I
IO Logic 16	0	0	0	0	----	I	I	-	----	I
IO Logic 17	0	0	0	0	----	I	I	-	----	I
IO Logic 18	0	0	0	0	----	I	I	-	----	I
IO Logic 19	0	0	0	0	----	I	I	-	----	I
IO Logic 20	0	0	0	0	----	I	I	-	----	I

IO Logic	Operand 2 Invert	Operator 3 Function	Operand 3 IO	Operand 3 Invert	Time Operator	Time
IO Logic 1	-	AND	I	!	EXT	0
IO Logic 2	-	AND	I	!	EXT	0
IO Logic 3	-	----	I	-	DLY	0
IO Logic 4	-	----	I	-	DLY	0
IO Logic 5	-	----	I	-	DLY	0
IO Logic 6	-	----	I	-	DLY	0
IO Logic 7	-	----	I	-	DLY	0
IO Logic 8	-	----	I	-	DLY	0
IO Logic 9	-	----	I	-	DLY	0
IO Logic 10	-	----	I	-	DLY	0
IO Logic 11	-	----	I	-	DLY	0
IO Logic 12	-	----	I	-	DLY	0
IO Logic 13	-	----	I	-	DLY	0
IO Logic 14	-	----	I	-	DLY	0
IO Logic 15	-	----	I	-	DLY	0
IO Logic 16	-	----	I	-	DLY	0
IO Logic 17	-	----	I	-	DLY	0
IO Logic 18	-	----	I	-	DLY	0
IO Logic 19	-	----	I	-	DLY	0
IO Logic 20	-	----	I	-	DLY	0

R-70
Signal #

MODEL 2070 SIGNAL OPERATION PROGRAMMABLE FEATURES SIGNAL OPERATION SPECIFICATION

Signal: **R-70**
Contract: D263528
PIN: 8823.50
File: 39.16-59

Date: 9/27/2018

TABLE OF SWITCH PACKS

SWITCH PACK	FUNCTION	INDICATIONS	FACE	TERMINAL	WIRE COLOR CODE	FACE	TERMINAL	WIRE COLOR CODE
1	PHASE 1 (EBL)	----	1	SP 1 R			SP 1 R	
		←		SP 1 Y	14/19C-E-O/B		SP 1 Y	
		←		SP 1 G	G/B		SP 1 G	
		Ground Wire		Grnd Bus	W/B		Grnd Bus	
2	PHASE 2 (WBT)	Red	3	SP 2 R	14/10C-D-R	4	SP 2 R	14/10C-B-R
		Yellow		SP 2 Y	O		SP 2 Y	O
		Green		SP 2 G	G		SP 2 G	G
		Ground Wire		Grnd Bus	W		Grnd Bus	W
3	PHASE 3 (NBL)	----	7	SP 3 R			SP 3 R	
		←		SP 3 Y	14/19C-E-O/R		SP 3 Y	
		←		SP 3 G	BL/R		SP 3 G	
		Ground Wire		Grnd Bus	W/R		Grnd Bus	
4	PHASE 4 (SBT)	Red	5	SP 4 R	14/10C-C-R	6	SP 4 R	14/05C-A-R
		Yellow		SP 4 Y	O		SP 4 Y	O
		Green		SP 4 G	G		SP 4 G	G
		Ground Wire		Grnd Bus	W		Grnd Bus	W
5	PHASE 5 (WBL)	----	3	SP 5 R			SP 5 R	
		←		SP 5 Y	14/10C-D-O/B		SP 5 Y	
		←		SP 5 G	G/B		SP 5 G	
		Ground Wire		Grnd Bus	W/B		Gmd Bus	
6	PHASE 6 (EBT)	Red	1	SP 6 R	14/19C-E-R	2	SP 6 R	14/10C-G-R
		Yellow		SP 6 Y	O		SP 6 Y	O
		Green		SP 6 G	G		SP 6 G	G
		Ground Wire		Grnd Bus	W		Gmd Bus	W
7	PHASE 7 (SBL)	----	5	SP 7 R			SP 7 R	
		←		SP 7 Y	14/10C-C-O/B		SP 7 Y	
		←		SP 7 G	G/B		SP 7 G	
		Ground Wire		Grnd Bus	W/B		Gmd Bus	
8	PHASE 8 (NBT)	Red	7	SP 8 R	14/19C-E-R/W	8	SP 8 R	14/05C-F-R
		Yellow		SP 8 Y	BL/W		SP 8 Y	O
		Green		SP 8 G	G/W		SP 8 G	G
		Ground Wire		Grnd Bus	B/W		Gmd Bus	W
9	OVL - 1 (PHASE 3 + PHASE 10 *) (EBR)	----	2	SP 9 R			SP 9 R	
		→		SP 9 Y	14/10C-G-O/B		SP 9 Y	
		→		SP 9 G	G/B		SP 9 G	
		Ground Wire		Grnd Bus	W/B		Gmd Bus	
10	OVL - 2 (PHASE 7 + PHASE 9 *) (WBR)	----	4	SP 10 R			SP 10 R	
		→		SP 10 Y	14/10C-B-O/B		SP 10 Y	
		→		SP 10 G	G/B		SP 10 G	
		Ground Wire		Grnd Bus	W/B		Gmd Bus	
11	PED - 1 (PHASE 2)	HAND	21	SP 11 R	14/05C-1P-R		SP 11 R	
		----		SP 11 Y			SP 11 Y	
		MAN		SP 11 G	G		SP 11 G	
		Ground Wire		Grnd Bus	W		Gmd Bus	
12	PED - 2 (PHASE 4)	HAND	22	SP 12 R	14/05C-2P-R		SP 12 R	
		----		SP 12 Y			SP 12 Y	
		MAN		SP 12 G	G		SP 12 G	
		Ground Wire		Grnd Bus	W		Gmd Bus	
13	PED - 3 (PHASE 6)	HAND	23	SP 13 R	14/05C-3P-R		SP 13 R	
		----		SP 13 Y			SP 13 Y	
		MAN		SP 13 G	G		SP 13 G	
		Ground Wire		Grnd Bus	W		Gmd Bus	
14	PED - 4 (PHASE 8)	HAND	24	SP 14 R	14/05C-4P-R		SP 14 R	
		----		SP 14 Y			SP 14 Y	
		MAN		SP 14 G	G		SP 14 G	
		Ground Wire		Grnd Bus	W		Gmd Bus	
15	PHASE 9 (WB BUS)	Red	9	SP 15 R	14/05C - H - R		SP 15 R	
		Yellow		SP 15 Y	- O		SP 15 Y	
		Green		SP 15 G	- G		SP 15 G	
		Ground Wire		Grnd Bus	- W		Grnd Bus	
16	PHASE 10 (EB BUS)	Red	10	SP 16 R	14/05C - J - R		SP 16 R	
		Yellow		SP 16 Y	- O		SP 16 Y	
		Green		SP 16 G	- G		SP 16 G	
		Ground Wire		Grnd Bus	- W		Grnd Bus	

INDICATES EXISTING

NO COLOR INDICATES BUS STATION AND INTER. IMPROVEMENTS CONTRACT

Signal Operation Specifications
Table Of Input Wiring
Route 59 @ Hemion & Campbell
Signal No. R-70 County: Rockland
Novemebr 2018

R-70

Terminal Number	Function	Detector Number	Det. Type	I/O Map	Fcn	Remarks
1A, 1B	Phase 1	1	Quadrupole	I1-1	1	Presence Loop
2A, 2B	Phase 2	2	Quadrupole	I1-2	2	Presence Loop
3A, 3B	Phase 3	3	Quadrupole	I1-3	3	Presence Loop
4A, 4B	Phase 4	4	Quadrupole	I1-4	4	Presence Loop
5A, 5B	Phase 5	5	Quadrupole	I1-5	5	Presence Loop
6A, 6B	Phase 6	6	Quadrupole	I1-6	6	Presence Loop
7A, 7B	Phase 7	7	Normal	I1-7	7	Presence Loop
8A, 8B	Phase 8	8	Quadrupole	I1-8	8	Presence Loop
9A, 9B	Phase 6	9	Quadrupole	I2-1	9	Presence Loop
10A, 10B	Phase 2	10	Quadrupole	I2-2	10	Presence Loop
11A, 11B	Phase 1	11	Normal	I2-3	11	Presence Loop
12A, 12B	Phase 2	12	Normal	I2-4	12	Presence Loop
13A, 13B	Phase 3	13	Normal	I2-5	13	Presence Loop
14A, 14B	Phase 4	14	Normal	I2-6	14	Presence Loop
15A, 15B	Phase 5	15	Normal	I2-7	15	Presence Loop
16A, 16B	Phase 6	16	Normal	I2-8	16	Presence Loop
17A, 17B	Phase 7	17	Normal	I3-1	17	Presence Loop
18A, 18B	Phase 8	18	Normal	I3-2	18	Presence Loop
19A, 19B	Phase 6	19	Normal	I3-3	19	Presence Loop
20A, 20B	Phase 2	20	Normal	I3-4	20	Presence Loop
21A, 21B	PED 1 - PHASE 7	21	Button	I3-5	129	PEDESTRIAN PUSHBUTTON
22A, 22B	PED 2 - PHASE 6	22	Button	I3-6	130	PEDESTRIAN PUSHBUTTON
23A, 23B	PED 3 - PHASE 3	23	Button	I3-7	131	PEDESTRIAN PUSHBUTTON
24A, 24B	PED 4 - PHASE 2	24	Button	I3-8	132	PEDESTRIAN PUSHBUTTON
25A, 25B				I5-1	189	
26A, 26B				I5-2	189	
27A, 27B				I5-3	189	
28A, 28B				I5-4	189	
C11-S Auxiliary Input File in 330SR Cabinet						
SLOT 1	E.B. PRIORITY, PHASE 6	N/A	GPS	I4-1	200	OPTICOM PHASE SELECTOR
	W.B. PRIORITY, PHASE 2	N/A	GPS	I4-2	201	OPTICOM PHASE SELECTOR
SLOT 2	N.B. PRIORITY, PHASE 8	N/A	GPS	I4-3		OPTICOM PHASE SELECTOR
	S.B. PRIORITY, PHASE 4	N/A	GPS	I4-4		OPTICOM PHASE SELECTOR
SLOT 3				I7-1	189	
				I7-2	189	
SLOT 4				I7-3	189	
				I7-4	189	
SLOT 5				I7-5	189	
				I7-6	189	
SLOT 6				I7-7	189	
				I7-8	189	
SLOT 7				I8-1	189	
				I8-2	189	
SLOT 8				I8-3	189	
				I8-4	189	
SLOT 9				I8-5	189	
				I8-6	189	
SLOT 10				I8-7	189	
				I8-8	189	
SLOT 11				N/A	N/A	
				N/A	N/A	
SLOT 12				N/A	N/A	
				N/A	N/A	
SLOT 13	POD DETECTORS	N/A	SDLC	N/A	N/A	TRAFFICWARE POD BASE STATION
	POD DETECTORS	N/A	SDLC	N/A	N/A	
SLOT 14	POD DETECTORS	N/A	SDLC	N/A	N/A	
	POD DETECTORS	N/A	SDLC	N/A	N/A	

mm 1.8.8.1

R-70

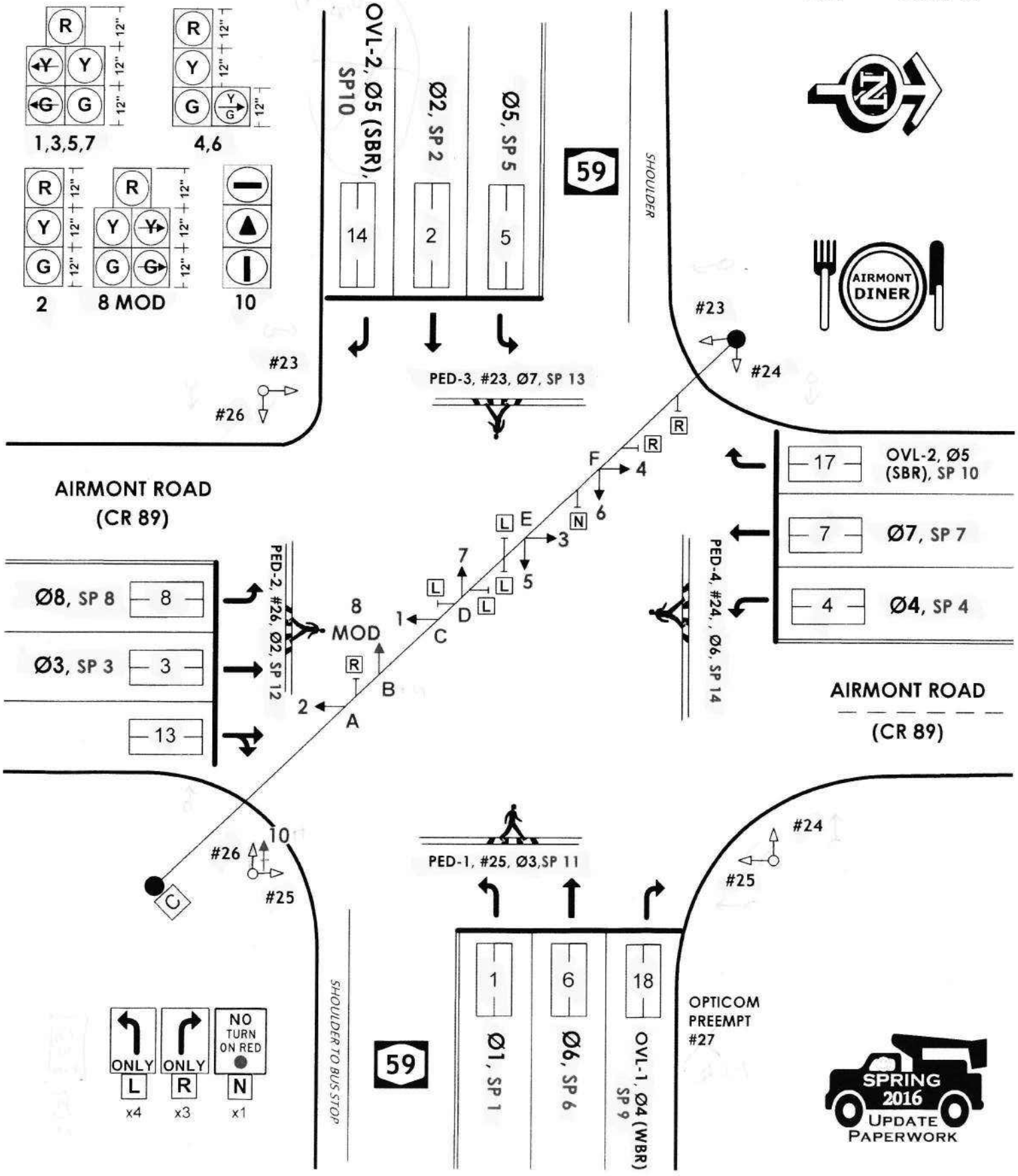
RADIO	Function	Detector Number	Det. Type	I/O Map	Fcn	Remarks
	SYSTEM DETECTOR	33	WIRELESS	SDLC	33	SYSTEM DETECTOR E.B. LEFT
	SYSTEM DETECTOR	34	WIRELESS	SDLC	34	SYSTEM DETECTOR E.B.T
	SYSTEM DETECTOR	35	WIRELESS	SDLC	35	SYSTEM DETECTOR E.B. ADVANCE
	SYSTEM DETECTOR	36	WIRELESS	SDLC	36	SYSTEM DETECTOR E.B.R
	SYSTEM DETECTOR	37	WIRELESS	SDLC	37	SYSTEM DETECTOR W.B.L.T
	SYSTEM DETECTOR	38	WIRELESS	SDLC	38	SYSTEM DETECTOR W.B.
	SYSTEM DETECTOR	39	WIRELESS	SDLC	39	SYSTEM DETECTOR W.B. ADVANCE
	SYSTEM DETECTOR	40	WIRELESS	SDLC	40	SYSTEM DETECTOR W.B.R
	SYSTEM DETECTOR	41	WIRELESS	SDLC	41	SYSTEM DETECTOR N.B.L
	SYSTEM DETECTOR	42	WIRELESS	SDLC	42	SYSTEM DETECTOR N.B.
	SYSTEM DETECTOR	43	WIRELESS	SDLC	43	SYSTEM DETECTOR S.B.L
	SYSTEM DETECTOR	44	WIRELESS	SDLC	44	SYSTEM DETECTOR S.B .
		45	WIRELESS	SDLC	45	
		46	WIRELESS	SDLC	46	
		47	WIRELESS	SDLC	47	
		48	WIRELESS	SDLC	48	
		49	WIRELESS	SDLC	49	
		50	WIRELESS	SDLC	50	
		51	WIRELESS	SDLC	51	
		52	WIRELESS	SDLC	52	
		53	WIRELESS	SDLC	53	
		54	WIRELESS	SDLC	54	
		55	WIRELESS	SDLC	55	
		56	WIRELESS	SDLC	56	
		57	WIRELESS	SDLC	57	
		58	WIRELESS	SDLC	58	
		59	WIRELESS	SDLC	59	
		60	WIRELESS	SDLC	60	
		61	WIRELESS	SDLC	61	
		62	WIRELESS	SDLC	62	
		63	WIRELESS	SDLC	63	
		64	WIRELESS	SDLC	64	

R-79
Signal #

STATE OF NEW YORK - DEPARTMENT OF TRANSPORTATION
TRAFFIC AND SAFETY DIVISION

Town of RAMAPO

Signal: **R-79**
Contract: D263528
PIN: 8823.50
File: 39.16-59



R-79
Signal #

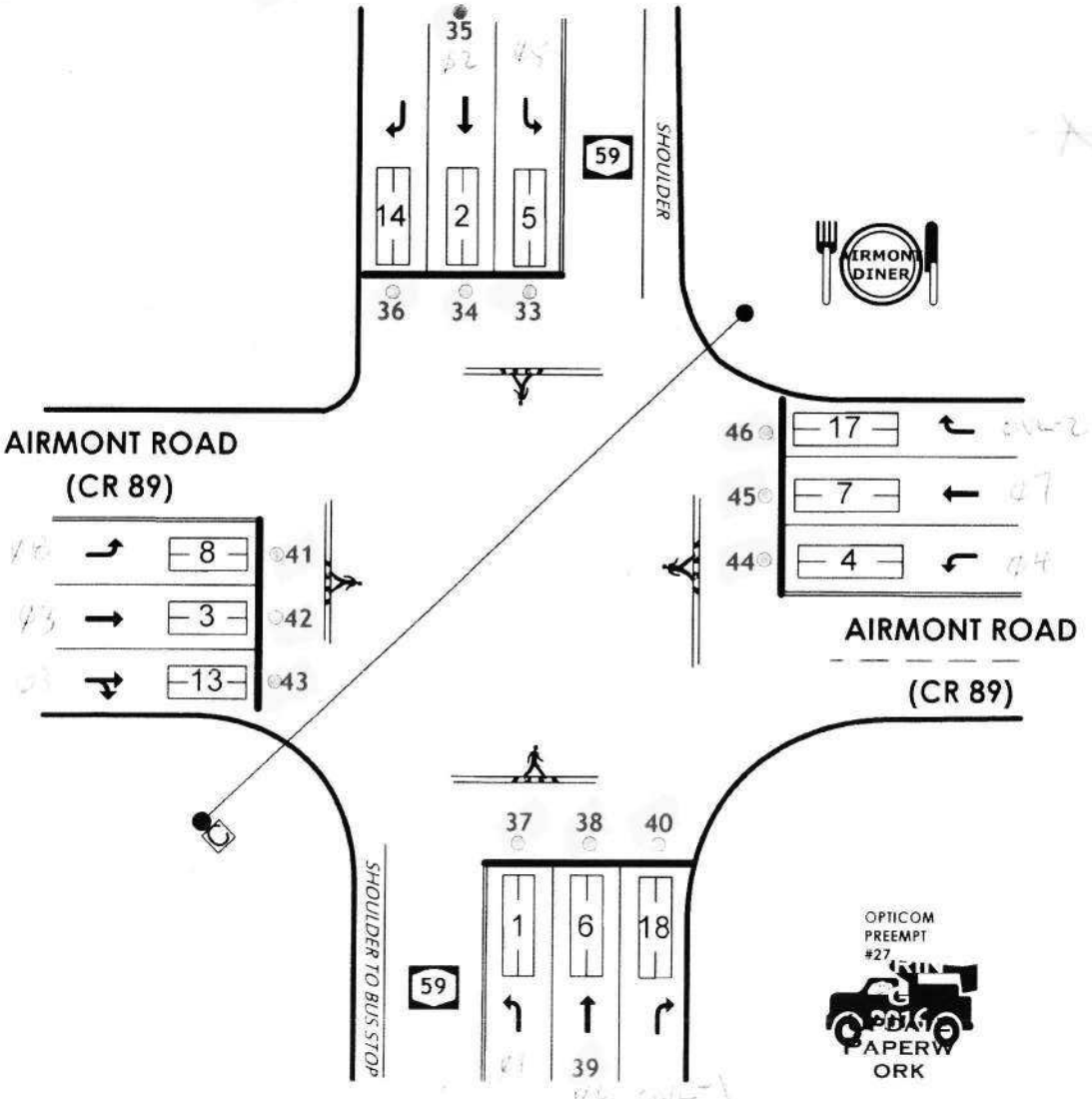
MODEL 2070 SIGNAL OPERATION
PROGRAMMABLE FEATURES
SIGNAL OPERATION SPECIFICATION

Signal: **R-79**
Contract: D263528
PIN: 8823.50
File: 39.16-59

Date: 9/27/2018

TABLE OF INPUT WIRING

FUNCTION	DETECTOR NUMBER	DET. TYPE	DET. AN OVER	IO MAP	FCN	REMARKS
PHASE 5	33	WIRELESS		SDLC	33	SYSTEM DETECTOR, EBL
PHASE 2	34	WIRELESS		SDLC	34	SYSTEM DETECTOR, EBT
PHASE 2	35	WIRELESS		SDLC	35	SYSTEM DETECTOR, EBT ADVANCE
PHASE 2	36	WIRELESS		SDLC	36	SYSTEM DETECTOR, EBR
PHASE 1	37	WIRELESS		SDLC	37	SYSTEM DETECTOR, WBL
PHASE 6	38	WIRELESS		SDLC	38	SYSTEM DETECTOR, WBT
PHASE 6	39	WIRELESS		SDLC	39	SYSTEM DETECTOR, WBT ADVANCE
PHASE 6	40	WIRELESS		SDLC	40	SYSTEM DETECTOR, WBR
PHASE 8	41	WIRELESS		SDLC	41	SYSTEM DETECTOR, NBL
PHASE 3	42	WIRELESS		SDLC	42	SYSTEM DETECTOR, NBT
PHASE 3	43	WIRELESS		SDLC	43	SYSTEM DETECTOR, NBT/NBR
PHASE 4	44	WIRELESS		SDLC	44	SYSTEM DETECTOR, SBL
PHASE 7	45	WIRELESS		SDLC	45	SYSTEM DETECTOR, SBT
PHASE 7	46	WIRELESS		SDLC	46	SYSTEM DETECTOR, SBR



R-79

NYSDOT- Region 8

Intersection Timing Sheet

Station ID [6.1]

Intersection : 15079 - v76 RTE 59 @ AIRMONT RD (Upload File)

Unit Parameters [6.5]	I/O Mode [1.8.6]	Print Date	Date Implemented
Phase Mode: USER		5/28/2019 1:23:35 PM	

Communication [6.5]

IP Address	Subnet Mask	Gateway	Port
192.168. .100	255.255.255.	192.168. .1	5001

Phase Timings [1.1.1]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Walk		7	7			7	7									
Ped Clearance		24	24			24	24									
Min Green	3	10	10	3	5	10	10	3		15						
Gap Ext	1	3	2	3	3	3	3	1		3						
Max1	25	55	45	35	35	55	55	8		15						
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	4	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	1	1	1	1	1	1	1	1	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit					45											
Dynamic Max Step					10											
Auto Flash Entry																
Auto Flash Exit																
Non-Actuated 1																
Non-Actuated 2																
Concurrent Ps	1	1	1	1	2	2	2	2	1	2						

Phase Options [1.1.2]

	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8	ϕ9	ϕ10	ϕ11	ϕ12	ϕ13	ϕ14	ϕ15	ϕ16
Enable	ON	ON	ON	ON	ON	ON	ON	ON		ON						
Lock Call																
Min Recall																
Max Recall			ON	ON				ON								
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Town of Ramapo

237 Rt. 59, Suffern, N.Y. 10901
845-357-5100 PHONE **845-357-8513** FAX

APPLICATION FOR PUBLIC ACCESS TO TOWN RECORDS

Records Access Officer: Christian G. Sampson, Town Clerk
TOWN RECORDS ARE OPEN FOR INSPECTION MONDAY – FRIDAY 9AM TO 5PM

I HEREBY APPLY TO INSPECT THE FOLLOWING TOWN RECORD (S):

Our office would like to request the traffic signal timing directive and plan for the intersection of N De Baun Ave & N Airmont Rd (CR 89). If possible please send an electronic copy to cbradley@dynamictraffic.com

Cailin Bradley, Dynamic Traffic, LLC	
(PRINT) FULL NAME	SIGNATURE
1904 Main Street	732-681-0760
ADDRESS	DAYTIME PHONE
Lake Como, NJ 07719	10/25/18
CITY/STATE/ZIP	DATE OF REQUEST

Date Called: _____ Comments: _____

THERE IS A CHARGE OF $ .25 PER COPIED PAGE allowed by law.

FOR TOWN USE ONLY

( ) Request Approved ( ) No Charge for Record ( ) Charge

( ) Request Denied for the Reason(s) below:

- ( ) Confidential Disclosure
- ( ) Part of Investigatory Files
- ( ) Unwarranted Invasion of Personal Privacy
- ( ) Record Not Located
- ( ) Record not Maintained by this Agency
- ( ) Would impair contract awards/collective bargaining agreements
- ( ) Trade secret, confidential commercial information
- ( ) Law enforcement records
- ( ) Exempted by Stature other than the Freedom of Information Act
- ( ) Other (Specify) _____

Certification Fee:
Photocopy Fee:
Total to be Paid: _____

Signature of Town Rep. Title Date

NOTICE: Any person denied access to records may appeal the denial within 30 days of the denial. Such appeals should be addressed to the Supervisor of the Town of Ramapo, 237 Route 59, Suffern, NY 10901.
I HEREBY APPEAL: ( )

Signature: _____ Date: _____

SET #4

PROPOSED-2 AM

INTERSECTION # AM-1

DATE: 5-Mar-08

TOWN SIGNAL # 23

INTERSECTION NAME: Airmont Road / N. Debaun Avenue

PHASE TIMING DATA / TIMER INTERVALS

INTERVAL	PHASE / INT. #	SB Left (Airmont Road)	NB Thru (Airmont Road)	WB Left	EB Thru (DeBaun Av.)	NB Left (Airmont Road)	SB Thru (Airmont Road)	EB Left	WB Thru (DeBaun Av.)
		F1	F2	F3	F4	F5	F6	F7	F8
MEMORY/RECALL	00	001	004		001	001	004		001
WALK	01		07.0				07.0		07.0
PEDESTRIAN CLEARANCE	02		13.0				13.0		13.0
INITIAL	03	010	010		010	010	010		010
VARIABLE INITIAL	04								
VARIABLE INITIAL LIMIT	05	050	050		050	050	050		050
TIME BEFORE REDUCTION	06								
TIME TO REDUCE	07								
MAXIMUM GAP	08	6.0	6.0		6.0	6.0	6.0		6.0
MINIMUM GAP	09								
GAP CLOCK	10	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY
MAXIMUM GREEN 1 - ALL TIME	11	011	032		020	011	032		020
MAXIMUM GREEN 2	12								
MAXIMUM GREEN 3	13								
RECALL GREEN	14	~~005~~ 010	~~032~~ 028		~~015~~ 020	~~005~~ 010	~~032~~ 028		~~015~~ 020
YELLOW CLEARANCE	15	03.0	03.0		03.0	03.0	03.0		03.0
RED CLEARANCE	16	01.0	01.0		01.0	01.0	01.0		01.0
THIRD CLEARANCE	17								
FOURTH CLEARANCE	18								
INTERVALS	19-28	RESERVED FOR FUTURE USE							
REDUCED BY	29	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY
EVERY	30	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY
CARS WAITING	31	USED	WITH	DAA	ONLY	USED	WITH	DBB	ONLY

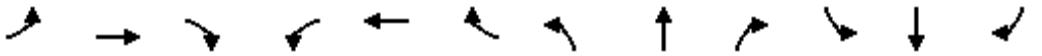
MEMORY / RECALL CODES: (MAY BE COMBINED)		
	MEMORY OFF	= 000
	MEMORY ON	= 001
	MINIMUM RECALL	= 002
	RECALL GREEN	= 004
	PED RECALL	= 008
	RECALL TO MAX	= 016

NOTES: CYCLE LENGTH = 75 SEC.

OFFSET = 72 SEC

(REFERENCED TO AIRMONT RD. AND SB I-87 RAMP)

Appendix C
Capacity Analysis



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	418	39	123	460	62	111	178	55	124	185	143
Future Volume (vph)	162	418	39	123	460	62	111	178	55	124	185	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.965			0.935	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1749	1432	1752	1727	1482	1901	1739	0	1745	1771	0
Flt Permitted	0.115			0.168			0.168			0.361		
Satd. Flow (perm)	203	1749	1432	310	1727	1445	336	1739	0	661	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			138		13			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	5%	9%	3%	10%	9%	6%	5%	11%	9%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	198	510	48	150	561	76	135	284	0	151	400	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	44.0	35.9	49.3	43.0	35.5	43.0	33.8	25.5		34.4	25.8	
Actuated g/C Ratio	0.42	0.34	0.47	0.41	0.34	0.41	0.32	0.24		0.33	0.25	

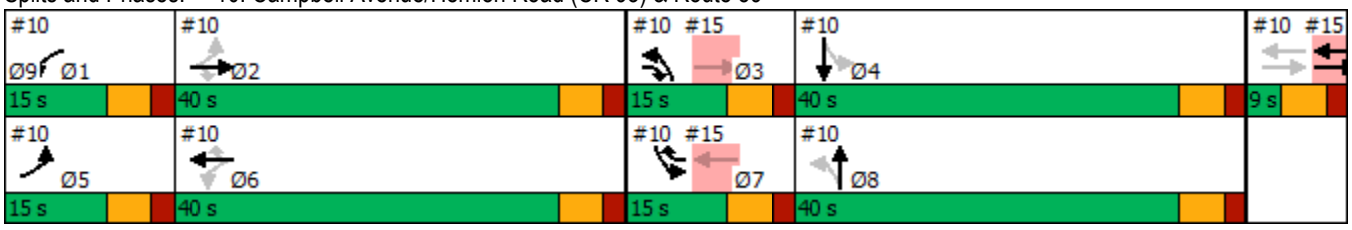
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.93	0.85	0.06	0.61	0.96	0.11	0.58	0.66		0.50	0.87	
Control Delay	73.9	48.8	0.2	31.5	65.2	0.3	32.5	42.2		28.5	55.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	73.9	48.8	0.2	31.5	65.2	0.3	32.5	42.2		28.5	55.1	
LOS	E	D	A	C	E	A	C	D		C	E	
Approach Delay		52.3			52.6			39.1			47.8	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	80	309	0	54	357	0	56	157		63	229	
Queue Length 95th (ft)	#233	#447	0	108	#530	0	98	238		109	330	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	212	597	754	253	582	682	246	578		313	601	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.93	0.85	0.06	0.59	0.96	0.11	0.55	0.49		0.48	0.67	

Intersection Summary

Area Type: Other
Cycle Length: 119
Actuated Cycle Length: 105.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 49.2 Intersection LOS: D
Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

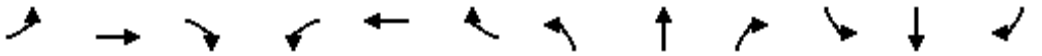
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	298	18	80	225	417	44	529	109	410	422	442
Future Volume (vph)	401	298	18	80	225	417	44	529	109	410	422	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.974				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1792	1724	1168	1811	1761	1299	1555	3339	0	1656	1627	1422
Flt Permitted	0.168			0.575			0.134			0.190		
Satd. Flow (perm)	317	1724	1168	1096	1761	1299	219	3339	0	331	1627	1422
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				446
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	409	304	18	82	230	426	45	651	0	418	431	451
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	53.2	45.6	71.3	26.9	24.4	48.9	69.7	40.2		67.3	39.0	68.3
Actuated g/C Ratio	0.36	0.31	0.49	0.18	0.17	0.33	0.48	0.28		0.46	0.27	0.47
v/c Ratio	0.99	0.57	0.03	0.34	0.78	0.98	0.12	0.70		0.98	0.99	0.50
Control Delay	85.6	42.4	0.1	39.5	65.4	70.3	30.2	52.7		88.8	94.8	3.0

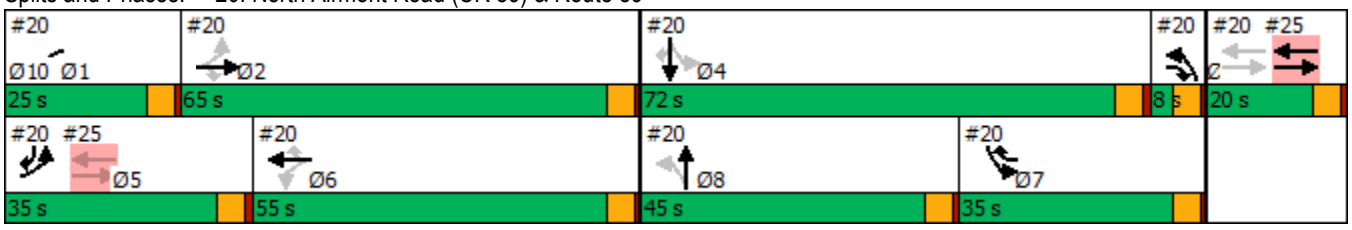
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	85.6	42.4	0.1	39.5	65.4	70.3	30.2	52.7		88.8	94.8	3.0
LOS	F	D	A	D	E	E	C	D		F	F	A
Approach Delay		65.5			65.3			51.3			61.0	
Approach LOS		E			E			D			E	
Queue Length 50th (ft)	315	235	0	47	210	194	20	284		310	~447	1
Queue Length 95th (ft)	#634	283	0	103	210	#555	50	402		#578	549	34
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	419	777	620	389	673	434	391	926		425	749	907
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.98	0.39	0.03	0.21	0.34	0.98	0.12	0.70		0.98	0.58	0.50

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 146
Natural Cycle: 120
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 60.9 Intersection LOS: E
Intersection Capacity Utilization 91.5% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

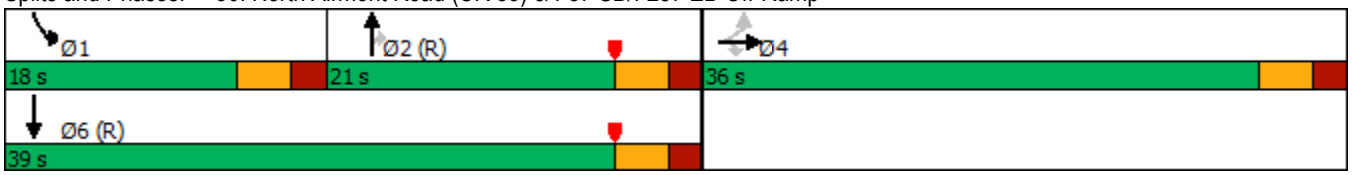
HCM 6th Edition methodology does not support clustered intersections.

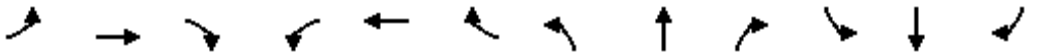
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	321	6	398	0	0	0	0	750	659	377	868	0
Future Volume (vph)	321	6	398	0	0	0	0	750	659	377	868	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						428			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	4%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	330	402	0	0	0	0	758	666	381	877	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		22.6	22.6					25.5	25.5	11.9	42.4	
Actuated g/C Ratio		0.30	0.30					0.34	0.34	0.16	0.57	
v/c Ratio		0.70	0.84					0.73	0.80	0.68	0.44	
Control Delay		30.5	33.1					25.8	17.0	32.0	7.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		30.5	33.1					25.8	17.0	32.0	7.5	
LOS		C	C					C	B	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		31.9						21.7			14.9	
Approach LOS		C						C			B	
Queue Length 50th (ft)		134	130					164	138	64	37	
Queue Length 95th (ft)		185	204					#326	#324	m112	173	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					1034	837	609	1974	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.51	0.65					0.73	0.80	0.63	0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 21.4		Intersection LOS: C	
Intersection Capacity Utilization 82.2%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





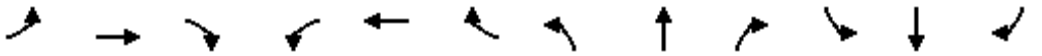
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	321	6	398	0	0	0	0	750	659	377	868	0
Future Volume (veh/h)	321	6	398	0	0	0	0	750	659	377	868	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1859	2067	2007	0
Adj Flow Rate, veh/h	324	6	402				0	758	0	381	877	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	4	2	6	0
Cap, veh/h	499	9	439				0	1021		509	2000	0
Arrive On Green	0.34	0.34	0.34				0.00	0.65	0.00	0.04	0.17	0.00
Sat Flow, veh/h	1460	27	1284				0	3226	1576	3818	3913	0
Grp Volume(v), veh/h	330	0	402				0	758	0	381	877	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1576	1909	1906	0
Q Serve(g_s), s	14.1	0.0	22.5				0.0	12.2	0.0	7.4	15.4	0.0
Cycle Q Clear(g_c), s	14.1	0.0	22.5				0.0	12.2	0.0	7.4	15.4	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	509	0	439				0	1021		509	2000	0
V/C Ratio(X)	0.65	0.00	0.92				0.00	0.74		0.75	0.44	0.00
Avail Cap(c_a), veh/h	615	0	531				0	1021		662	2000	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.61	0.61	0.00
Uniform Delay (d), s/veh	20.9	0.0	23.6				0.0	11.0	0.0	34.6	21.1	0.0
Incr Delay (d2), s/veh	1.0	0.0	16.9				0.0	4.9	0.0	1.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	13.2				0.0	5.8	0.0	6.1	11.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	0.0	40.6				0.0	15.9	0.0	36.0	21.5	0.0
LnGrp LOS	C	A	D				A	B		D	C	A
Approach Vol, veh/h		732						758			1258	
Approach Delay, s/veh		32.1						15.9			25.9	
Approach LOS		C						B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	29.4		30.7		44.3
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	9.4	0.0		24.5		0.0
Green Ext Time (p_c), s	0.4	0.0		1.2		0.0

Intersection Summary		
HCM 6th Ctrl Delay		24.8
HCM 6th LOS		C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

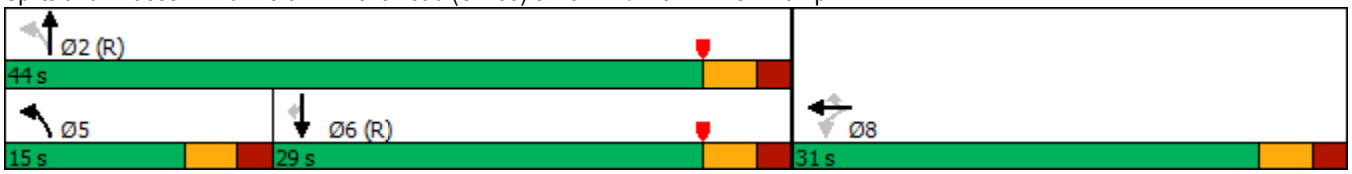


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	583	1	279	300	771	0	0	662	274
Future Volume (vph)	0	0	0	583	1	279	300	771	0	0	662	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1603	1606	1553	1355	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.148					
Satd. Flow (perm)	0	0	0	1603	1606	1553	211	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						366
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	7%	0%	4%	23%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	399	401	382	411	1056	0	0	907	375
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				22.6	22.6	22.6	42.4	42.4			27.4	27.4
Actuated g/C Ratio				0.30	0.30	0.30	0.57	0.57			0.37	0.37
v/c Ratio				0.83	0.83	0.71	1.52	0.63			0.69	0.48
Control Delay				39.2	39.5	24.0	266.8	14.5			19.9	5.5
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.8	0.4

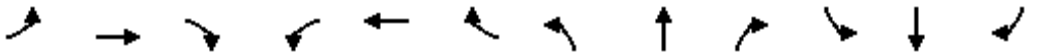
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				39.2	39.5	24.0	266.8	14.5			20.7	5.9
LOS				D	D	C	F	B			C	A
Approach Delay					34.4			85.2			16.4	
Approach LOS					C			F			B	
Queue Length 50th (ft)				171	172	109	~243	207			187	25
Queue Length 95th (ft)				202	202	136	#305	207			217	58
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				555	556	605	271	1683			1324	779
Starvation Cap Reductn				0	0	0	0	0			167	110
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.72	0.72	0.63	1.52	0.63			0.78	0.56

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.52			
Intersection Signal Delay: 47.5		Intersection LOS: D	
Intersection Capacity Utilization 82.2%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



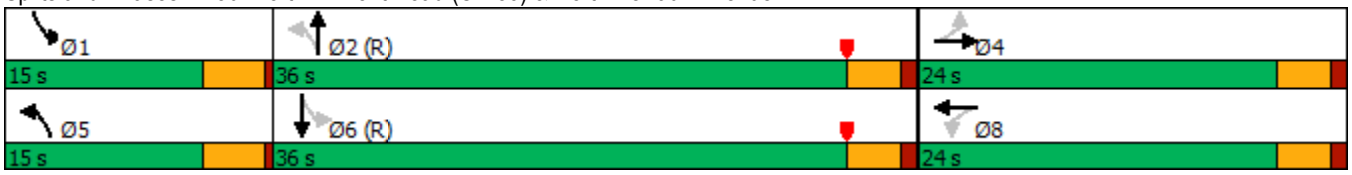
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	0	31	16	0	19	35	1302	10	21	1227	5
Future Volume (vph)	63	0	31	16	0	19	35	1302	10	21	1227	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.956			0.927			0.999			0.999	
Flt Protected		0.967			0.977		0.950			0.950		
Satd. Flow (prot)	0	1726	0	0	1673	0	1574	3321	0	1718	3290	0
Flt Permitted		0.774			0.884		0.133			0.132		
Satd. Flow (perm)	0	1382	0	0	1514	0	220	3321	0	239	3290	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		5.0			12.6			4.2			9.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	5%	0%	0%	8%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	104	0	0	39	0	39	1458	0	23	1369	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.3			11.3		56.9	53.7		56.1	50.9	
Actuated g/C Ratio		0.15			0.15		0.76	0.72		0.75	0.68	
v/c Ratio		0.39			0.13		0.11	0.61		0.06	0.61	
Control Delay		15.8			3.4		3.8	10.9		3.0	9.1	

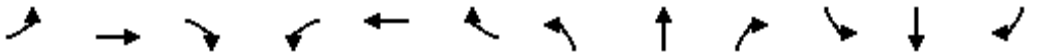
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		15.8			3.4		3.8	10.9		3.0	9.1	
LOS		B			A		A	B		A	A	
Approach Delay		15.8			3.4			10.7			9.0	
Approach LOS		B			A			B			A	
Queue Length 50th (ft)		13			0		3	114		2	183	
Queue Length 95th (ft)		52			10		12	#397		m6	228	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		422			457		366	2377		397	2232	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.25			0.09		0.11	0.61		0.06	0.61	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 10.0 Intersection LOS: B
Intersection Capacity Utilization 51.3% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	0	31	16	0	19	35	1302	10	21	1227	5
Future Volume (veh/h)	63	0	31	16	0	19	35	1302	10	21	1227	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1826	1900	2057	1937	1682
Adj Flow Rate, veh/h	70	0	34	18	0	21	39	1447	11	23	1363	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	5	0	0	8	25
Cap, veh/h	199	16	66	145	24	116	466	2339	18	367	2402	11
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.07	0.66	0.66	0.10	1.00	1.00
Sat Flow, veh/h	938	128	518	593	194	918	1711	3529	27	1959	3758	17
Grp Volume(v), veh/h	104	0	0	39	0	0	39	711	747	23	667	702
Grp Sat Flow(s),veh/h/ln	1584	0	0	1705	0	0	1711	1735	1821	1959	1840	1934
Q Serve(g_s), s	3.0	0.0	0.0	0.0	0.0	0.0	0.5	17.6	17.6	0.3	0.0	0.0
Cycle Q Clear(g_c), s	4.4	0.0	0.0	1.4	0.0	0.0	0.5	17.6	17.6	0.3	0.0	0.0
Prop In Lane	0.67		0.33	0.46		0.54	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	281	0	0	286	0	0	466	1149	1207	367	1177	1237
V/C Ratio(X)	0.37	0.00	0.00	0.14	0.00	0.00	0.08	0.62	0.62	0.06	0.57	0.57
Avail Cap(c_a), veh/h	495	0	0	505	0	0	591	1149	1207	555	1177	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	0.0	0.0	29.2	0.0	0.0	3.2	7.2	7.2	5.1	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.8	0.0	0.0	0.3	2.5	2.4	0.3	2.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	0.0	1.2	0.0	0.0	0.3	9.7	10.1	0.2	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	0.0	0.0	30.0	0.0	0.0	3.4	9.7	9.6	5.4	2.0	1.9
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		104			39			1497			1392	
Approach Delay, s/veh		33.4			30.0			9.5			2.0	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	53.7		13.5	9.6	51.9		13.5				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	19.6		6.4	2.5	2.0		3.4				
Green Ext Time (p_c), s	0.0	11.2		0.9	0.1	23.5		0.3				

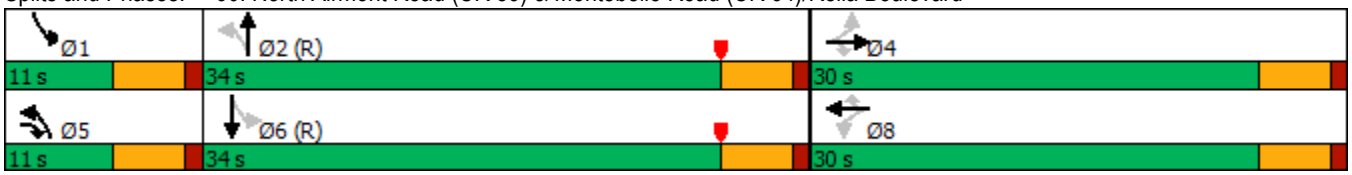
Intersection Summary			
HCM 6th Ctrl Delay		7.1	
HCM 6th LOS		A	

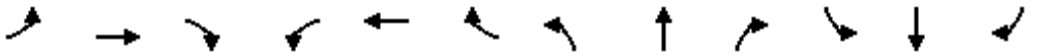
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	14	332	3	1	5	177	693	57	16	613	68
Future Volume (vph)	91	14	332	3	1	5	177	693	57	16	613	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.989			0.985	
Flt Protected		0.959		0.950			0.950			0.950		
Satd. Flow (prot)	0	1731	1433	1797	913	1242	1645	3236	0	1762	3461	0
Flt Permitted		0.755		0.682			0.281			0.338		
Satd. Flow (perm)	0	1363	1433	1290	913	1242	487	3236	0	627	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			106			102		13			18	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	369	3	1	6	197	833	0	18	757	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	
Act Effct Green (s)		12.5	24.9	12.5	12.5	12.5	55.5	54.2		46.1	40.1	
Actuated g/C Ratio		0.17	0.33	0.17	0.17	0.17	0.74	0.72		0.61	0.53	
v/c Ratio		0.52	0.68	0.01	0.01	0.02	0.38	0.36		0.04	0.41	
Control Delay		36.1	20.1	24.0	24.0	0.2	5.5	4.2		5.2	12.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.1	20.1	24.0	24.0	0.2	5.5	4.2		5.2	12.8	
LOS		D	C	C	C	A	A	A		A	B	
Approach Delay		24.0			9.7			4.4			12.6	
Approach LOS		C			A			A			B	
Queue Length 50th (ft)		51	101	1	0	0	21	47		2	101	
Queue Length 95th (ft)		93	151	8	4	0	42	93		9	187	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		454	546	430	304	482	519	2340		479	1859	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.26	0.68	0.01	0.00	0.01	0.38	0.36		0.04	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	14	332	3	1	5	177	693	57	16	613	68
Future Volume (veh/h)	91	14	332	3	1	5	177	693	57	16	613	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	101	16	369	3	1	6	197	770	63	18	681	76
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	370	51	493	553	172	404	448	1562	128	455	1559	174
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.16	1.00	1.00	0.02	0.45	0.45
Sat Flow, veh/h	1035	188	1405	1596	635	1492	1717	3073	251	1919	3472	387
Grp Volume(v), veh/h	117	0	369	3	1	6	197	411	422	18	375	382
Grp Sat Flow(s),veh/h/ln	1223	0	1405	1596	635	1492	1717	1642	1683	1919	1914	1945
Q Serve(g_s), s	5.4	0.0	17.3	0.0	0.1	0.2	4.6	0.0	0.0	0.4	10.1	10.1
Cycle Q Clear(g_c), s	5.7	0.0	17.3	0.1	0.1	0.2	4.6	0.0	0.0	0.4	10.1	10.1
Prop In Lane	0.86		1.00	1.00		1.00	1.00		0.15	1.00		0.20
Lane Grp Cap(c), veh/h	421	0	493	553	172	404	448	835	855	455	860	874
V/C Ratio(X)	0.28	0.00	0.75	0.01	0.01	0.01	0.44	0.49	0.49	0.04	0.44	0.44
Avail Cap(c_a), veh/h	497	0	581	653	212	497	448	835	855	568	860	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	21.4	20.0	20.0	20.0	9.0	0.0	0.0	10.6	14.2	14.2
Incr Delay (d2), s/veh	0.4	0.0	4.5	0.0	0.0	0.0	0.7	2.0	1.9	0.0	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	0.0	10.1	0.1	0.0	0.1	2.5	0.8	0.8	0.3	7.8	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	25.9	20.0	20.0	20.0	9.7	2.0	1.9	10.7	15.8	15.7
LnGrp LOS	C	A	C	B	B	C	A	A	A	B	B	B
Approach Vol, veh/h		486			10			1030			775	
Approach Delay, s/veh		25.0			20.0			3.4			15.6	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	43.1		25.3	11.0	38.7		25.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.4	2.0		19.3	6.6	12.1		2.2				
Green Ext Time (p_c), s	0.0	3.1		1.0	0.0	2.5		0.0				

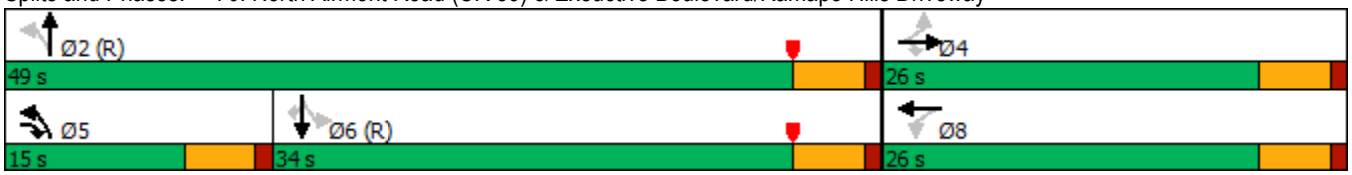
Intersection Summary			
HCM 6th Ctrl Delay		12.2	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	0	20	3	0	0	122	909	19	1	913	34
Future Volume (vph)	18	0	20	3	0	0	122	909	19	1	913	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		
Frt			0.850					0.997				0.850
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1589	1370	0	1805	0	1727	3333	0	1806	3492	1577
Flt Permitted							0.240			0.281		
Satd. Flow (perm)	0	1673	1370	0	1900	0	436	3333	0	534	3492	1577
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29					5				102
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		5.2			4.8			6.6			11.1	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	6%	0%	10%	0%	0%	0%	0%	7%	0%	0%	7%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	22	0	3	0	134	1020	0	1	1003	37
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	26.0	26.0	15.0	26.0	26.0		15.0	49.0		34.0	34.0	34.0
Total Split (%)	34.7%	34.7%	20.0%	34.7%	34.7%		20.0%	65.3%		45.3%	45.3%	45.3%
Maximum Green (s)	21.0	21.0	10.0	21.0	21.0		10.0	44.0		29.0	29.0	29.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		7.0	9.3		6.5		67.2	71.2		58.9	58.9	58.9
Actuated g/C Ratio		0.09	0.12		0.09		0.90	0.95		0.79	0.79	0.79
v/c Ratio		0.13	0.11		0.02		0.27	0.32		0.00	0.37	0.03
Control Delay		32.2	8.6		30.3		1.6	0.7		9.0	5.5	1.4
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.1	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		32.2	8.6		30.3		1.6	0.7		9.0	5.5	1.4
LOS		C	A		C		A	A		A	A	A
Approach Delay		19.8			30.3			0.8			5.4	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)		9	0		1		0	0		0	30	0
Queue Length 95th (ft)		28	13		9		m10	36		m1	222	m3
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		468	257		532		563	3163		419	2740	1259
Starvation Cap Reductn		0	0		0		0	261		0	0	0
Spillback Cap Reductn		0	2		0		0	0		0	393	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.04	0.09		0.01		0.24	0.35		0.00	0.43	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 44 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 3.3		Intersection LOS: A	
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	0	20	3	0	0	122	909	19	1	913	34
Future Volume (veh/h)	18	0	20	3	0	0	122	909	19	1	913	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1752	1900	1900	1900	1876	1773	1876	2175	2070	2085
Adj Flow Rate, veh/h	20	0	22	3	0	0	134	999	21	1	1003	37
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	0	10	0	0	0	0	7	0	0	7	6
Cap, veh/h	155	0	153	159	0	0	542	2786	59	544	2741	1231
Arrive On Green	0.04	0.00	0.04	0.04	0.00	0.00	0.13	1.00	1.00	0.70	0.70	0.70
Sat Flow, veh/h	1454	0	1485	1559	0	0	1787	3373	71	643	3933	1766
Grp Volume(v), veh/h	20	0	22	3	0	0	134	499	521	1	1003	37
Grp Sat Flow(s),veh/h/ln	1455	0	1485	1559	0	0	1787	1684	1760	643	1967	1766
Q Serve(g_s), s	0.9	0.0	1.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	7.8	0.5
Cycle Q Clear(g_c), s	1.0	0.0	1.0	0.1	0.0	0.0	1.3	0.0	0.0	0.0	7.8	0.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	155	0	153	159	0	0	542	1391	1454	544	2741	1231
V/C Ratio(X)	0.13	0.00	0.14	0.02	0.00	0.00	0.25	0.36	0.36	0.00	0.37	0.03
Avail Cap(c_a), veh/h	500	0	509	504	0	0	668	1391	1454	544	2741	1231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.71	0.71	0.71	0.86	0.86	0.86
Uniform Delay (d), s/veh	35.0	0.0	30.6	34.6	0.0	0.0	2.5	0.0	0.0	3.5	4.6	3.5
Incr Delay (d2), s/veh	0.4	0.0	0.4	0.0	0.0	0.0	0.2	0.5	0.5	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	0.7	0.1	0.0	0.0	0.4	0.4	0.4	0.0	4.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	0.0	31.0	34.6	0.0	0.0	2.7	0.5	0.5	3.5	5.0	3.6
LnGrp LOS	D	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		42			3			1154			1041	
Approach Delay, s/veh		33.1			34.6			0.8			4.9	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		67.0		8.0	9.7	57.3		8.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		44.0		21.0	10.0	29.0		21.0				
Max Q Clear Time (g_c+I1), s		2.0		3.0	3.3	9.8		2.1				
Green Ext Time (p_c), s		4.0		0.1	0.2	4.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			3.3									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	8	393	9	3	446
Future Vol, veh/h	6	8	393	9	3	446
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	8	0	0	7
Mvmt Flow	10	13	624	14	5	708

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1349	631	0	0	638	0
Stage 1	631	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	306	558	-	-	956	-
Stage 1	707	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	303	558	-	-	956	-
Mov Cap-2 Maneuver	303	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	410	956	-
HCM Lane V/C Ratio	-	-	0.054	0.005	-
HCM Control Delay (s)	-	-	14.3	8.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	579	18	73	638	7	138
Future Vol, veh/h	579	18	73	638	7	138
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	11	7	17	3
Mvmt Flow	603	19	76	665	7	144

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	622	0	1430	613
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	817	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	917	-	189	525
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	491	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	917	-	173	525
Mov Cap-2 Maneuver	-	-	-	-	309	-
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	450	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	15.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	508	-	-	917	-
HCM Lane V/C Ratio	0.297	-	-	0.083	-
HCM Control Delay (s)	15.1	-	-	9.3	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	12.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	113	181	207	62	2	74	1	157	2	1	0
Future Vol, veh/h	0	113	181	207	62	2	74	1	157	2	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	157	251	288	86	3	103	1	218	3	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	89	0	0	408	0	0	947	948	283	1056	1072	88
Stage 1	-	-	-	-	-	-	283	283	-	664	664	-
Stage 2	-	-	-	-	-	-	664	665	-	392	408	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1519	-	-	1119	-	-	285	324	756	231	250	981
Stage 1	-	-	-	-	-	-	748	725	-	488	497	-
Stage 2	-	-	-	-	-	-	503	534	-	665	628	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1519	-	-	1119	-	-	224	236	756	129	182	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	236	-	129	182	-
Stage 1	-	-	-	-	-	-	748	725	-	488	362	-
Stage 2	-	-	-	-	-	-	365	389	-	472	628	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.1	34.9	30.9
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	428	1519	-	-	1119	-	-	143
HCM Lane V/C Ratio	0.753	-	-	-	0.257	-	-	0.029
HCM Control Delay (s)	34.9	0	-	-	9.3	0	-	30.9
HCM Lane LOS	D	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	6.2	0	-	-	1	-	-	0.1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	17	0	0	10	14	1368	2	5	1236	25
Future Vol, veh/h	31	0	17	0	0	10	14	1368	2	5	1236	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	67	0	40	0	0	88	33	6	50	25	7	50
Mvmt Flow	33	0	18	0	0	11	15	1440	2	5	1301	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2074	2796	664	2132	2808	721	1327	0	0	1442	0	0
Stage 1	1324	1324	-	1471	1471	-	-	-	-	-	-	-
Stage 2	750	1472	-	661	1337	-	-	-	-	-	-	-
Critical Hdwy	9.24	6.9	7.9	7.5	6.5	8.66	4.76	-	-	4.6	-	-
Critical Hdwy Stg 1	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.17	4	3.7	3.5	4	4.18	2.53	-	-	2.45	-	-
Pot Cap-1 Maneuver	*86	23	*512	*103	22	*420	*749	-	-	*717	-	-
Stage 1	*82	196	-	*136	193	-	-	-	-	-	-	-
Stage 2	*232	164	-	*423	224	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*82	23	*512	*97	21	*420	*749	-	-	*717	-	-
Mov Cap-2 Maneuver	*82	23	-	*97	21	-	-	-	-	-	-	-
Stage 1	*80	195	-	*133	189	-	-	-	-	-	-	-
Stage 2	*222	161	-	*405	222	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	53	13.8	0.1	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 749	-	-	82	512	420	* 717	-	-
HCM Lane V/C Ratio	0.02	-	-	0.398	0.035	0.025	0.007	-	-
HCM Control Delay (s)	9.9	-	-	75.3	12.3	13.8	10.1	-	-
HCM Lane LOS	A	-	-	F	B	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.6	0.1	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	2	9	0	0	0	10	204	53	46	361	5
Future Vol, veh/h	9	2	9	0	0	0	10	204	53	46	361	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	10	4	17	35	13	0
Mvmt Flow	14	3	14	0	0	0	15	309	80	70	547	8

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	1070	1110	551			555	0	0	389	0	0
Stage 1	691	691	-			-	-	-	-	-	-
Stage 2	379	419	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.2	-	-	4.45	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.29	-	-	2.515	-	-
Pot Cap-1 Maneuver	247	211	538			976	-	-	1011	-	-
Stage 1	501	449	-			-	-	-	-	-	-
Stage 2	696	593	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	218	0	538			976	-	-	1011	-	-
Mov Cap-2 Maneuver	218	0	-			-	-	-	-	-	-
Stage 1	491	0	-			-	-	-	-	-	-
Stage 2	626	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.7	0.3	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	976	-	-	218	538	1011	-	-
HCM Lane V/C Ratio	0.016	-	-	0.063	0.031	0.069	-	-
HCM Control Delay (s)	8.7	0	-	22.6	11.9	8.8	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	19	213	0	0	389
Future Vol, veh/h	23	19	213	0	0	389
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	70	47	6	0	0	10
Mvmt Flow	31	25	284	0	0	519

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	803	284	0	0	284	0
Stage 1	284	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.7	6.47	-	-	4.1	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	4.13	3.723	-	-	2.2	-
Pot Cap-1 Maneuver	299	670	-	-	1290	-
Stage 1	651	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	299	670	-	-	1290	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	651	-	-	-	-	-
Stage 2	509	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	399	1290	-
HCM Lane V/C Ratio	-	-	0.14	-	-
HCM Control Delay (s)	-	-	15.5	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	252	20	8	230	41	44
Future Vol, veh/h	252	20	8	230	41	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	9	15	50	14	5	16
Mvmt Flow	371	29	12	338	60	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	400	0	748	386
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	362	-
Critical Hdwy	-	-	4.6	-	7.25	6.76
Critical Hdwy Stg 1	-	-	-	-	6.25	-
Critical Hdwy Stg 2	-	-	-	-	6.25	-
Follow-up Hdwy	-	-	2.65	-	3.545	3.444
Pot Cap-1 Maneuver	-	-	941	-	318	606
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	313	606
Mov Cap-2 Maneuver	-	-	-	-	313	-
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	634	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	417	-	-	941	-
HCM Lane V/C Ratio	0.3	-	-	0.013	-
HCM Control Delay (s)	17.3	-	-	8.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0	-

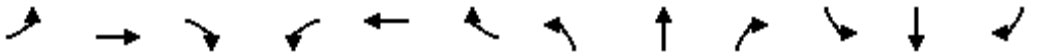
Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	230	66	64	201	37	34
Future Vol, veh/h	230	66	64	201	37	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	18	5	18	16	21
Mvmt Flow	267	77	74	234	43	40

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	344	0	688	306
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	382	-
Critical Hdwy	-	-	4.15	-	5.36	5.81
Critical Hdwy Stg 1	-	-	-	-	4.36	-
Critical Hdwy Stg 2	-	-	-	-	4.36	-
Follow-up Hdwy	-	-	2.245	-	3.644	3.489
Pot Cap-1 Maneuver	-	-	1198	-	492	728
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1198	-	457	728
Mov Cap-2 Maneuver	-	-	-	-	457	-
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	556	-	-	1198	-
HCM Lane V/C Ratio	0.148	-	-	0.062	-
HCM Control Delay (s)	12.6	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	506	86	80	575	90	150	160	101	153	164	170
Future Volume (vph)	185	506	86	80	575	90	150	160	101	153	164	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.942			0.924	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1646	1766	1516	1752	1810	1568	1919	1722	0	1847	1754	0
Flt Permitted	0.111			0.255			0.253			0.283		
Satd. Flow (perm)	192	1766	1516	470	1810	1568	511	1722	0	550	1754	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		27			44	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	4%	3%	3%	5%	3%	5%	5%	4%	3%	6%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	191	522	89	82	593	93	155	269	0	158	344	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	43.1	36.6	50.5	37.9	31.7	45.7	24.2	15.8		24.5	16.0	
Actuated g/C Ratio	0.48	0.40	0.56	0.42	0.35	0.51	0.27	0.17		0.27	0.18	

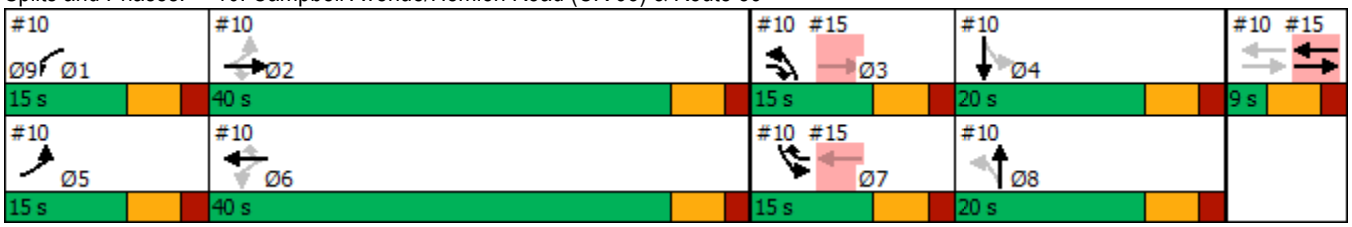
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.80	0.73	0.10	0.28	0.94	0.11	0.58	0.83		0.59	0.99	
Control Delay	46.1	32.1	0.2	15.7	52.6	0.2	32.8	55.7		33.0	82.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	46.1	32.1	0.2	15.7	52.6	0.2	32.8	55.7		33.0	82.0	
LOS	D	C	A	B	D	A	C	E		C	F	
Approach Delay		31.9			42.3			47.3			66.6	
Approach LOS		C			D			D			E	
Queue Length 50th (ft)	57	246	0	21	306	0	64	138		66	~204	
Queue Length 95th (ft)	#238	#478	0	62	#575	0	125	249		128	#350	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	238	717	932	338	699	884	283	324		283	346	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.80	0.73	0.10	0.24	0.85	0.11	0.55	0.83		0.56	0.99	

Intersection Summary

Area Type: Other
Cycle Length: 99
Actuated Cycle Length: 90.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 44.7 Intersection LOS: D
Intersection Capacity Utilization 87.9% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

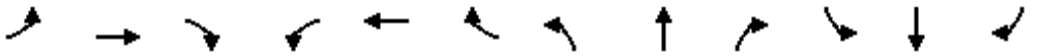
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	414	371	67	128	320	462	56	430	148	366	553	511
Future Volume (vph)	414	371	67	128	320	462	56	430	148	366	553	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.961				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1758	1808	1457	1829	1828	1398	1626	3275	0	1703	1739	1463
Flt Permitted	0.122			0.445			0.100			0.244		
Satd. Flow (perm)	226	1808	1424	856	1828	1398	171	3275	0	437	1739	1463
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					23				304
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	427	382	69	132	330	476	58	596	0	377	570	527
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	62.8	49.3	65.1	38.8	30.3	57.8	58.6	40.2		73.2	51.8	82.0
Actuated g/C Ratio	0.41	0.32	0.43	0.26	0.20	0.38	0.39	0.26		0.48	0.34	0.54

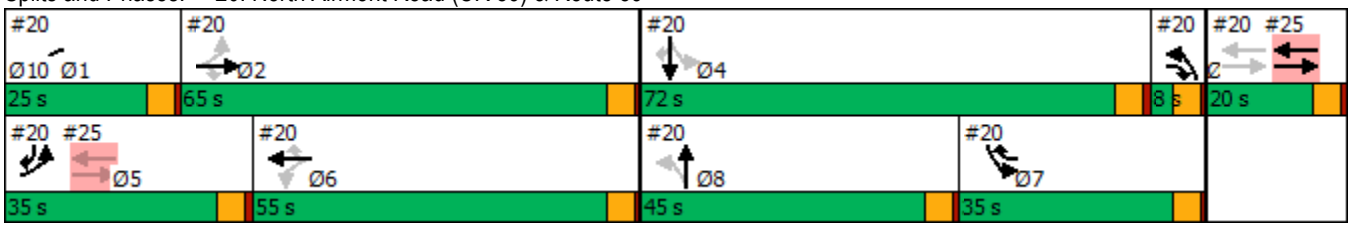
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.08	0.65	0.10	0.46	0.90	0.89	0.24	0.67		0.82	0.96	0.57
Control Delay	109.5	48.2	1.7	36.5	83.0	44.7	42.0	53.4		61.3	76.3	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.3	0.0
Total Delay	109.5	48.2	1.7	36.5	83.0	44.7	42.0	53.4		61.3	76.6	6.8
LOS	F	D	A	D	F	D	D	D		E	E	A
Approach Delay		74.3			57.0			52.4			47.7	
Approach LOS		E			E			D			D	
Queue Length 50th (ft)	~409	317	0	78	319	221	30	272		241	~619	69
Queue Length 95th (ft)	#753	356	11	152	299	#466	#103	394		#480	751	117
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	397	749	671	398	637	532	243	884		462	771	930
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	22	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.08	0.51	0.10	0.33	0.52	0.89	0.24	0.67		0.82	0.76	0.57

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 151.7
Natural Cycle: 120
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 56.6 Intersection LOS: E
Intersection Capacity Utilization 102.6% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

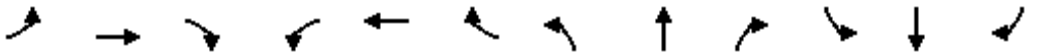
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

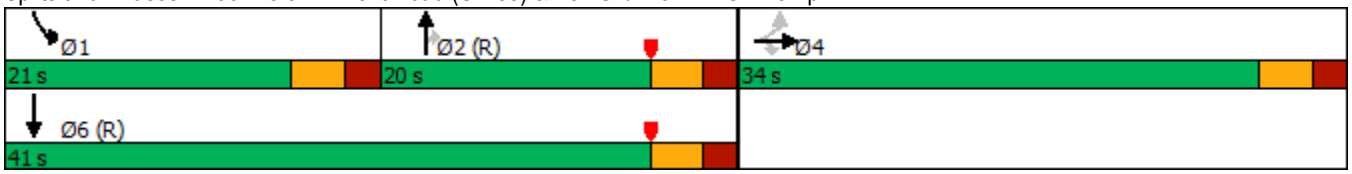


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	3	277	0	0	0	0	710	666	419	1162	0
Future Volume (vph)	261	3	277	0	0	0	0	710	666	419	1162	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1472	0	0	0	0	3183	1632	3485	3558	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1472	0	0	0	0	3183	1610	3482	3558	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						450			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	7%	0%	0%	0%	0%	8%	4%	3%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	267	280	0	0	0	0	717	673	423	1174	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		17.8	17.8					28.9	28.9	13.3	47.2	
Actuated g/C Ratio		0.24	0.24					0.39	0.39	0.18	0.63	
v/c Ratio		0.73	0.66					0.58	0.75	0.68	0.52	
Control Delay		37.3	22.8					18.4	12.5	31.4	3.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.3	22.8					18.4	12.5	31.4	3.5	
LOS		D	C					B	B	C	A	
Approach Delay		29.9						15.5			10.9	
Approach LOS		C						B			B	
Queue Length 50th (ft)		115	73					137	121	72	0	
Queue Length 95th (ft)		168	131					#263	#306	m123	208	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	631					1227	897	743	2241	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.45	0.44					0.58	0.75	0.57	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	261	3	277	0	0	0	0	710	666	419	1162	0
Future Volume (veh/h)	261	3	277	0	0	0	0	710	666	419	1162	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1649				0	1728	1859	2052	2037	0
Adj Flow Rate, veh/h	264	3	280				0	717	0	423	1174	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	7				0	8	4	3	4	0
Cap, veh/h	385	4	326				0	1394		541	2452	0
Arrive On Green	0.23	0.23	0.23				0.00	0.85	0.00	0.14	0.63	0.00
Sat Flow, veh/h	1651	19	1397				0	3370	1576	3791	3971	0
Grp Volume(v), veh/h	267	0	280				0	717	0	423	1174	0
Grp Sat Flow(s),veh/h/ln	1670	0	1397				0	1642	1576	1895	1935	0
Q Serve(g_s), s	10.9	0.0	14.4				0.0	4.4	0.0	8.1	12.0	0.0
Cycle Q Clear(g_c), s	10.9	0.0	14.4				0.0	4.4	0.0	8.1	12.0	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	389	0	326				0	1394		541	2452	0
V/C Ratio(X)	0.69	0.00	0.86				0.00	0.51		0.78	0.48	0.00
Avail Cap(c_a), veh/h	646	0	540				0	1394		809	2452	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.55	0.55	0.00
Uniform Delay (d), s/veh	26.3	0.0	27.6				0.0	3.6	0.0	31.0	7.2	0.0
Incr Delay (d2), s/veh	0.8	0.0	3.6				0.0	1.4	0.0	0.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.6	0.0	8.6				0.0	2.1	0.0	5.9	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	0.0	31.2				0.0	5.0	0.0	31.8	7.6	0.0
LnGrp LOS	C	A	C				A	A		C	A	A
Approach Vol, veh/h		547						717			1597	
Approach Delay, s/veh		29.2						5.0			14.0	
Approach LOS		C						A			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.7	36.8		22.5		52.5
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	10.1	0.0		16.4		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

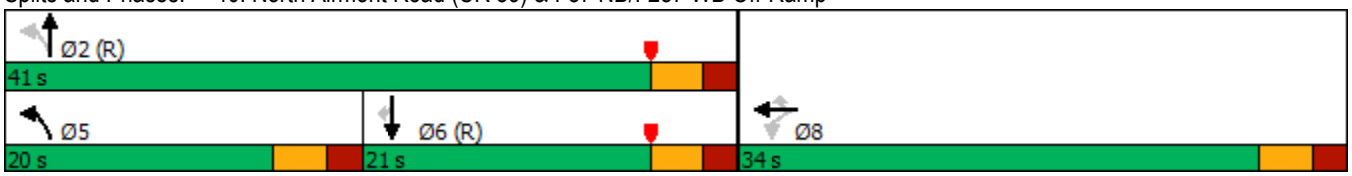
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	752	2	434	343	628	0	0	829	398
Future Volume (vph)	0	0	0	752	2	434	343	628	0	0	829	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1665	1670	1583	1488	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.143					
Satd. Flow (perm)	0	0	0	1665	1670	1583	224	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						190						367
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	2%	12%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	383	386	443	350	641	0	0	846	406
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				22.7	22.7	22.7	42.3	42.3			22.8	22.8
Actuated g/C Ratio				0.30	0.30	0.30	0.56	0.56			0.30	0.30
v/c Ratio				0.76	0.76	0.73	0.95	0.37			0.77	0.57
Control Delay				33.2	33.4	19.5	47.6	4.4			38.2	19.5
Queue Delay				0.0	0.0	0.0	0.0	0.0			3.1	0.5

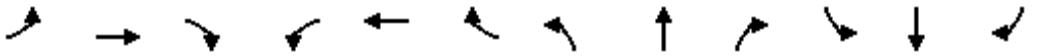
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				33.2	33.4	19.5	47.6	4.4			41.4	20.0
LOS				C	C	B	D	A			D	C
Approach Delay					28.2			19.6			34.4	
Approach LOS					C			B			C	
Queue Length 50th (ft)				165	166	100	134	51			230	107
Queue Length 95th (ft)				236	238	180	#268	14			#369	216
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				643	645	728	379	1727			1094	713
Starvation Cap Reductn				0	0	0	0	0			156	78
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.60	0.60	0.61	0.92	0.37			0.90	0.64

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 28.0		Intersection LOS: C	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



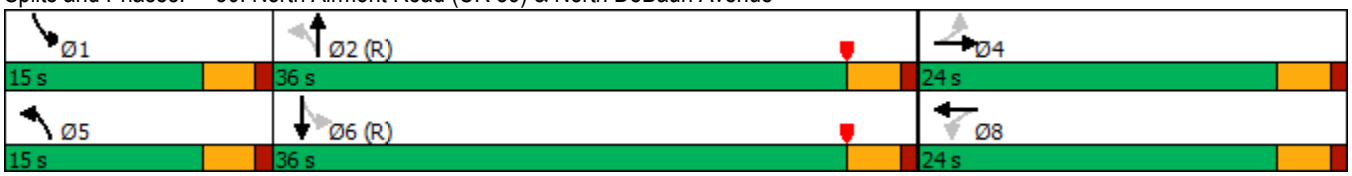
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	0	30	26	0	27	38	1236	32	30	1374	11
Future Volume (vph)	63	0	30	26	0	27	38	1236	32	30	1374	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.956			0.931			0.996			0.999	
Flt Protected		0.967			0.976		0.950			0.950		
Satd. Flow (prot)	0	1778	0	0	1842	0	1589	3314	0	1718	3420	0
Flt Permitted		0.831			0.856		0.105			0.151		
Satd. Flow (perm)	0	1528	0	0	1615	0	176	3314	0	273	3420	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			4			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		4.1			10.5			4.2			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	5%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	101	0	0	57	0	41	1378	0	33	1505	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		11.2			11.2		57.0	53.8		56.2	51.0	
Actuated g/C Ratio		0.15			0.15		0.76	0.72		0.75	0.68	
v/c Ratio		0.35			0.19		0.13	0.58		0.08	0.65	
Control Delay		14.7			6.8		3.9	9.9		3.6	9.0	

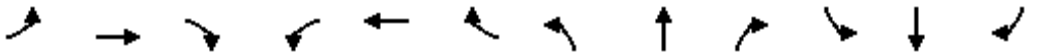
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		14.7			6.8		3.9	9.9		3.6	9.0	
LOS		B			A		A	A		A	A	
Approach Delay		14.7			6.8			9.7			8.9	
Approach LOS		B			A			A			A	
Queue Length 50th (ft)		12			0		4	103		3	144	
Queue Length 95th (ft)		50			22		12	350		m8	205	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		461			484		341	2378		418	2326	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.22			0.12		0.12	0.58		0.08	0.65	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 9.4 Intersection LOS: A
Intersection Capacity Utilization 53.3% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	0	30	26	0	27	38	1236	32	30	1374	11
Future Volume (veh/h)	63	0	30	26	0	27	38	1236	32	30	1374	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1826	1900	2057	1997	2057
Adj Flow Rate, veh/h	68	0	33	28	0	29	41	1343	35	33	1493	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	5	0	0	4	0
Cap, veh/h	203	16	67	155	24	110	442	2229	58	407	2450	20
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.65	0.65	0.13	1.00	1.00
Sat Flow, veh/h	954	126	524	647	184	860	1725	3454	90	1959	3858	31
Grp Volume(v), veh/h	101	0	0	57	0	0	41	674	704	33	734	771
Grp Sat Flow(s),veh/h/ln	1604	0	0	1691	0	0	1725	1735	1810	1959	1897	1992
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	0.0	0.5	16.9	16.9	0.4	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	0.0	2.1	0.0	0.0	0.5	16.9	16.9	0.4	0.0	0.0
Prop In Lane	0.67		0.33	0.49		0.51	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	286	0	0	289	0	0	442	1119	1168	407	1205	1265
V/C Ratio(X)	0.35	0.00	0.00	0.20	0.00	0.00	0.09	0.60	0.60	0.08	0.61	0.61
Avail Cap(c_a), veh/h	497	0	0	504	0	0	563	1119	1168	565	1205	1265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	0.0	29.4	0.0	0.0	3.2	7.7	7.7	4.9	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.0	1.2	0.0	0.0	0.3	2.4	2.3	0.3	2.3	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.3	0.0	0.0	1.8	0.0	0.0	0.3	9.6	9.9	0.2	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	0.0	30.6	0.0	0.0	3.5	10.1	10.0	5.2	2.3	2.2
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		101			57			1419			1538	
Approach Delay, s/veh		32.8			30.6			9.9			2.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	52.4		13.6	9.7	51.6		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.4	18.9		6.1	2.5	2.0		4.1				
Green Ext Time (p_c), s	0.1	11.4		0.8	0.1	25.2		0.4				

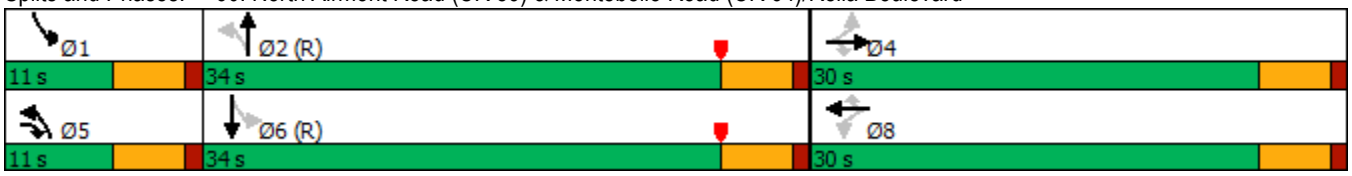
Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

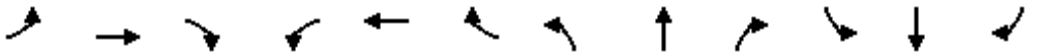
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	3	226	66	22	52	270	730	38	27	898	101
Future Volume (vph)	100	3	226	66	22	52	270	730	38	27	898	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.993			0.985	
Flt Protected		0.954		0.950			0.950			0.950		
Satd. Flow (prot)	0	1661	1433	1762	1723	1553	1710	3357	0	1745	3549	0
Flt Permitted		0.715		0.687			0.131			0.347		
Satd. Flow (perm)	0	1245	1433	1274	1723	1553	236	3357	0	638	3549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			41			102		8			19	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	238	69	23	55	284	808	0	28	1051	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		12.7	32.2	12.7	12.7	12.7	55.3	51.7		39.0	32.8	
Actuated g/C Ratio		0.17	0.43	0.17	0.17	0.17	0.74	0.69		0.52	0.44	
v/c Ratio		0.51	0.37	0.32	0.08	0.16	0.55	0.35		0.07	0.67	
Control Delay		36.6	12.8	30.5	25.1	2.5	18.1	7.2		6.1	20.2	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.6	12.8	30.5	25.1	2.5	18.1	7.2		6.1	20.2	
LOS		D	B	C	C	A	B	A		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		20.2			19.2			10.1			19.8	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		47	57	29	9	0	52	57		3	199	
Queue Length 95th (ft)		87	101	60	26	9	#188	131		12	287	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		415	638	424	574	585	518	2316		424	1563	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.26	0.37	0.16	0.04	0.09	0.55	0.35		0.07	0.67	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 15.8		Intersection LOS: B	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	3	226	66	22	52	270	730	38	27	898	101
Future Volume (veh/h)	100	3	226	66	22	52	270	730	38	27	898	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	105	3	238	69	23	55	284	768	40	28	945	106
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	315	8	378	432	386	342	430	1911	99	535	1872	210
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.16	1.00	1.00	0.03	0.53	0.53
Sat Flow, veh/h	1167	40	1405	1592	2046	1810	1773	3284	171	1904	3523	395
Grp Volume(v), veh/h	108	0	238	69	23	55	284	397	411	28	521	530
Grp Sat Flow(s),veh/h/ln	1207	0	1405	1592	2046	1810	1773	1698	1757	1904	1944	1975
Q Serve(g_s), s	5.7	0.0	11.2	0.0	0.7	1.9	6.0	0.0	0.0	0.5	12.9	12.9
Cycle Q Clear(g_c), s	6.4	0.0	11.2	2.2	0.7	1.9	6.0	0.0	0.0	0.5	12.9	12.9
Prop In Lane	0.97		1.00	1.00		1.00	1.00		0.10	1.00		0.20
Lane Grp Cap(c), veh/h	322	0	378	432	386	342	430	988	1022	535	1033	1049
V/C Ratio(X)	0.33	0.00	0.63	0.16	0.06	0.16	0.66	0.40	0.40	0.05	0.50	0.50
Avail Cap(c_a), veh/h	505	0	581	662	682	603	430	988	1022	631	1033	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	24.1	25.6	25.0	25.5	8.3	0.0	0.0	7.3	11.3	11.3
Incr Delay (d2), s/veh	0.6	0.0	1.7	0.2	0.1	0.2	3.5	1.1	1.1	0.0	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	0.0	6.8	1.9	0.6	1.5	3.4	0.6	0.6	0.3	9.2	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	0.0	25.9	25.7	25.0	25.7	11.8	1.1	1.1	7.4	13.0	13.0
LnGrp LOS	C	A	C	C	C	C	B	A	A	A	B	B
Approach Vol, veh/h		346			147			1092			1079	
Approach Delay, s/veh		26.6			25.6			3.9			12.9	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	48.6		19.2	11.0	44.8		19.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		13.2	8.0	14.9		4.2				
Green Ext Time (p_c), s	0.0	2.9		1.0	0.0	3.5		0.4				

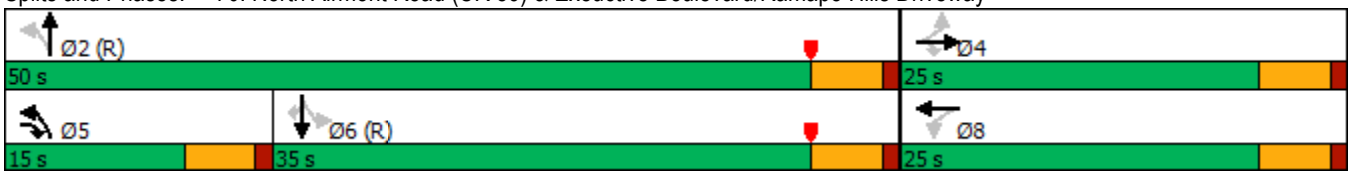
Intersection Summary			
HCM 6th Ctrl Delay		11.7	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	0	58	15	0	4	48	996	18	5	1154	31
Future Volume (vph)	38	0	58	15	0	4	48	996	18	5	1154	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor							1.00	1.00		1.00		0.98
Frt			0.850		0.973			0.997				0.850
Flt Protected		0.950			0.962		0.950			0.950		
Satd. Flow (prot)	0	1604	1507	0	1778	0	1661	3427	0	1806	3593	1623
Flt Permitted		0.744			0.742		0.173			0.271		
Satd. Flow (perm)	0	1257	1507	0	1372	0	302	3427	0	515	3593	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29		102			4				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%	4%	4%	0%	0%	4%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	60	0	20	0	50	1057	0	5	1202	32
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	50.0		35.0	35.0	35.0
Total Split (%)	33.3%	33.3%	20.0%	33.3%	33.3%		20.0%	66.7%		46.7%	46.7%	46.7%
Maximum Green (s)	20.0	20.0	10.0	20.0	20.0		10.0	45.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		8.2	15.1		8.1		61.3	63.3		53.0	53.0	53.0
Actuated g/C Ratio		0.11	0.20		0.11		0.82	0.84		0.71	0.71	0.71
v/c Ratio		0.29	0.18		0.08		0.14	0.37		0.01	0.47	0.03
Control Delay		35.3	13.6		0.7		4.6	3.9		1.8	3.1	0.1
Queue Delay		0.0	0.9		0.2		0.0	0.2		0.0	0.2	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		35.3	14.5		0.8		4.6	4.2		1.8	3.3	0.1
LOS		D	B		A		A	A		A	A	A
Approach Delay		22.8			0.8			4.2			3.2	
Approach LOS		C			A			A			A	
Queue Length 50th (ft)		18	11		0		2	26		0	19	0
Queue Length 95th (ft)		44	35		0		m19	164		m0	38	m0
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		335	398		440		428	2891		364	2540	1152
Starvation Cap Reductn		0	0		0		0	993		0	0	0
Spillback Cap Reductn		0	196		195		0	0		0	559	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.12	0.30		0.08		0.12	0.56		0.01	0.61	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 8 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 4.4		Intersection LOS: A	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	0	58	15	0	4	48	996	18	5	1154	31
Future Volume (veh/h)	38	0	58	15	0	4	48	996	18	5	1154	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1900	1900	1900	1900	1817	1817	1876	2175	2115	2130
Adj Flow Rate, veh/h	40	0	60	16	0	4	50	1038	19	5	1202	32
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	0	0	0	4	4	0	0	4	3
Cap, veh/h	188	0	168	156	10	20	426	2794	51	528	2796	1255
Arrive On Green	0.06	0.00	0.06	0.06	0.00	0.06	0.06	1.00	1.00	0.70	0.70	0.70
Sat Flow, veh/h	1498	0	1610	1134	156	322	1731	3469	63	621	4019	1804
Grp Volume(v), veh/h	40	0	60	20	0	0	50	517	540	5	1202	32
Grp Sat Flow(s),veh/h/ln	1498	0	1610	1612	0	0	1731	1726	1806	621	2010	1804
Q Serve(g_s), s	1.0	0.0	2.6	0.0	0.0	0.0	0.5	0.0	0.0	0.2	9.7	0.4
Cycle Q Clear(g_c), s	1.8	0.0	2.6	0.8	0.0	0.0	0.5	0.0	0.0	0.2	9.7	0.4
Prop In Lane	1.00		1.00	0.80		0.20	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	168	185	0	0	426	1390	1454	528	2796	1255
V/C Ratio(X)	0.21	0.00	0.36	0.11	0.00	0.00	0.12	0.37	0.37	0.01	0.43	0.03
Avail Cap(c_a), veh/h	483	0	499	487	0	0	582	1390	1454	528	2796	1255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.85	0.85	0.85	0.77	0.77	0.77
Uniform Delay (d), s/veh	33.9	0.0	31.2	33.4	0.0	0.0	3.1	0.0	0.0	3.5	5.0	3.5
Incr Delay (d2), s/veh	0.6	0.0	1.3	0.3	0.0	0.0	0.1	0.6	0.6	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	1.9	0.6	0.0	0.0	0.2	0.5	0.5	0.0	5.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	0.0	32.5	33.7	0.0	0.0	3.2	0.6	0.6	3.5	5.3	3.6
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		100			20			1107			1239	
Approach Delay, s/veh		33.3			33.7			0.8			5.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		65.4		9.6	8.2	57.2		9.6				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		45.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s		2.0		4.6	2.5	11.7		2.8				
Green Ext Time (p_c), s		4.2		0.2	0.0	5.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.6									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	11	429	6	2	466
Future Vol, veh/h	21	11	429	6	2	466
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	5	0	0	6
Mvmt Flow	25	13	517	7	2	561

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1086	521	0	0	524	0
Stage 1	521	-	-	-	-	-
Stage 2	565	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	391	628	-	-	1053	-
Stage 1	756	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	390	628	-	-	1053	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	756	-	-	-	-	-
Stage 2	734	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	448	1053	-
HCM Lane V/C Ratio	-	-	0.086	0.002	-
HCM Control Delay (s)	-	-	13.8	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	743	17	164	723	22	109
Future Vol, veh/h	743	17	164	723	22	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	7	6	4	0	7
Mvmt Flow	790	18	174	769	23	116

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	808	0	1916	799
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	1117	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	800	-	115	413
Stage 1	-	-	-	-	533	-
Stage 2	-	-	-	-	405	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	800	-	90	413
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	533	-
Stage 2	-	-	-	-	317	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	21.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	360	-	-	800	-
HCM Lane V/C Ratio	0.387	-	-	0.218	-
HCM Control Delay (s)	21.2	-	-	10.8	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	1.8	-	-	0.8	-

Intersection	
Int Delay, s/veh	12.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	66	116	169	123	6	148	8	193	3	4	3
Future Vol, veh/h	0	66	116	169	123	6	148	8	193	3	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	74	130	190	138	7	166	9	217	3	4	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	145	0	0	204	0	0	664	664	139	774	726	142
Stage 1	-	-	-	-	-	-	139	139	-	522	522	-
Stage 2	-	-	-	-	-	-	525	525	-	252	204	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1450	-	-	1338	-	-	430	445	913	347	352	918
Stage 1	-	-	-	-	-	-	886	810	-	574	525	-
Stage 2	-	-	-	-	-	-	598	599	-	778	708	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1338	-	-	373	376	913	229	297	918
Mov Cap-2 Maneuver	-	-	-	-	-	-	373	376	-	229	297	-
Stage 1	-	-	-	-	-	-	886	810	-	574	444	-
Stage 2	-	-	-	-	-	-	498	506	-	587	708	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.6	25.7	16.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	554	1450	-	-	1338	-	-	335
HCM Lane V/C Ratio	0.708	-	-	-	0.142	-	-	0.034
HCM Control Delay (s)	25.7	0	-	-	8.1	0	-	16.1
HCM Lane LOS	D	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	5.7	0	-	-	0.5	-	-	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	0	39	0	0	15	14	1310	2	3	1376	60
Future Vol, veh/h	51	0	39	0	0	15	14	1310	2	3	1376	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	22	0	12	0	0	31	17	6	50	100	4	34
Mvmt Flow	56	0	43	0	0	16	15	1440	2	3	1512	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2301	3023	789	2233	3055	721	1578	0	0	1442	0	0
Stage 1	1551	1551	-	1471	1471	-	-	-	-	-	-	-
Stage 2	750	1472	-	762	1584	-	-	-	-	-	-	-
Critical Hdwy	8.34	6.9	7.34	7.5	6.5	7.52	4.44	-	-	6.1	-	-
Critical Hdwy Stg 1	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.72	4	3.42	3.5	4	3.61	2.37	-	-	3.2	-	-
Pot Cap-1 Maneuver	*97	1	*513	*103	1	*487	684	-	-	*549	-	-
Stage 1	*82	149	-	*136	193	-	-	-	-	-	-	-
Stage 2	*301	164	-	*368	170	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*91	1	*513	*92	1	*487	684	-	-	*549	-	-
Mov Cap-2 Maneuver	*91	1	-	*92	1	-	-	-	-	-	-	-
Stage 1	*80	148	-	*133	189	-	-	-	-	-	-	-
Stage 2	*284	160	-	*335	169	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	58.7	12.7	0.1	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	684	-	-	91	513	487	* 549	-	-
HCM Lane V/C Ratio	0.022	-	-	0.616	0.084	0.034	0.006	-	-
HCM Control Delay (s)	10.4	-	-	93.9	12.7	12.7	11.6	-	-
HCM Lane LOS	B	-	-	F	B	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.9	0.3	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	2	6	0	0	0	11	293	26	28	276	14
Future Vol, veh/h	22	2	6	0	0	0	11	293	26	28	276	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	7	18	5	0
Mvmt Flow	26	2	7	0	0	0	13	341	30	33	321	16

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	777	792	329			337	0	0	371	0	0
Stage 1	395	395	-			-	-	-	-	-	-
Stage 2	382	397	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.1	-	-	4.28	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.362	-	-
Pot Cap-1 Maneuver	368	324	717			1234	-	-	1105	-	-
Stage 1	685	608	-			-	-	-	-	-	-
Stage 2	694	607	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	350	0	717			1234	-	-	1105	-	-
Mov Cap-2 Maneuver	350	0	-			-	-	-	-	-	-
Stage 1	676	0	-			-	-	-	-	-	-
Stage 2	668	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.5	0.3	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1234	-	-	350	717	1105	-	-
HCM Lane V/C Ratio	0.01	-	-	0.073	0.013	0.029	-	-
HCM Control Delay (s)	7.9	0	-	16.1	10.1	8.4	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	34	315	0	0	289
Future Vol, veh/h	29	34	315	0	0	289
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	18	6	0	0	7
Mvmt Flow	33	39	358	0	0	328

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	686	358	0	0	358	0
Stage 1	358	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Critical Hdwy	6	6.18	-	-	4.1	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	-	-	2.2	-
Pot Cap-1 Maneuver	449	665	-	-	1212	-
Stage 1	741	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	449	665	-	-	1212	-
Mov Cap-2 Maneuver	449	-	-	-	-	-
Stage 1	741	-	-	-	-	-
Stage 2	762	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	544	1212	-
HCM Lane V/C Ratio	-	-	0.132	-	-
HCM Control Delay (s)	-	-	12.6	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	240	22	23	262	36	21
Future Vol, veh/h	240	22	23	262	36	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	8	5	0	4	0	0
Mvmt Flow	270	25	26	294	40	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	295	0	629	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	346	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1278	-	391	737
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	667	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1278	-	382	737
Mov Cap-2 Maneuver	-	-	-	-	382	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	651	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	464	-	-	1278	-
HCM Lane V/C Ratio	0.138	-	-	0.02	-
HCM Control Delay (s)	14	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

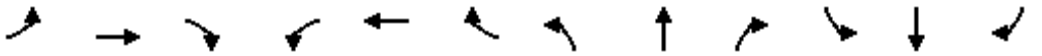
Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	238	23	16	240	45	51
Future Vol, veh/h	238	23	16	240	45	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	7	4	31	5	13	4
Mvmt Flow	270	26	18	273	51	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	296	0	592	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	309	-
Critical Hdwy	-	-	4.41	-	5.33	5.64
Critical Hdwy Stg 1	-	-	-	-	4.33	-
Critical Hdwy Stg 2	-	-	-	-	4.33	-
Follow-up Hdwy	-	-	2.479	-	3.617	3.336
Pot Cap-1 Maneuver	-	-	1117	-	550	787
Stage 1	-	-	-	-	814	-
Stage 2	-	-	-	-	798	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1117	-	540	787
Mov Cap-2 Maneuver	-	-	-	-	540	-
Stage 1	-	-	-	-	814	-
Stage 2	-	-	-	-	783	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	648	-	-	1117	-
HCM Lane V/C Ratio	0.168	-	-	0.016	-
HCM Control Delay (s)	11.7	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	191	508	48	134	532	77	130	203	62	145	203	158
Future Volume (vph)	191	508	48	134	532	77	130	203	62	145	203	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.965			0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1749	1432	1752	1727	1482	1901	1739	0	1745	1769	0
Flt Permitted	0.116			0.117			0.142			0.315		
Satd. Flow (perm)	205	1749	1432	216	1727	1445	284	1739	0	577	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			138		13			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	5%	9%	3%	10%	9%	6%	5%	11%	9%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	620	59	163	649	94	159	324	0	177	441	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.6	35.6	49.1	43.2	35.4	43.1	36.7	28.1		37.1	28.3	
Actuated g/C Ratio	0.40	0.33	0.46	0.40	0.33	0.40	0.34	0.26		0.34	0.26	

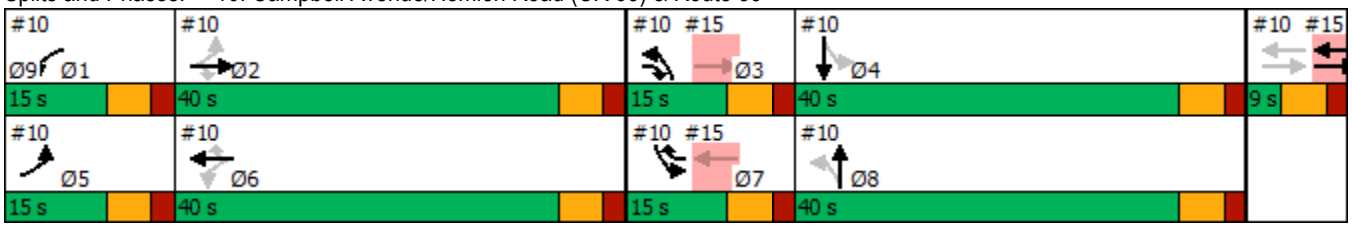
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.13	1.07	0.08	0.77	1.15	0.14	0.71	0.70		0.60	0.90	
Control Delay	128.7	95.2	0.2	46.9	119.4	1.6	40.5	43.6		32.5	58.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	128.7	95.2	0.2	46.9	119.4	1.6	40.5	43.6		32.5	58.6	
LOS	F	F	A	D	F	A	D	D		C	E	
Approach Delay		97.6			94.1			42.6			51.1	
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	~135	~482	0	64	~528	0	66	185		75	262	
Queue Length 95th (ft)	#292	#623	0	#161	#723	5	113	274		126	373	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	207	577	733	216	566	667	233	562		298	585	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.13	1.07	0.08	0.75	1.15	0.14	0.68	0.58		0.59	0.75	

Intersection Summary

Area Type: Other
Cycle Length: 119
Actuated Cycle Length: 107.8
Natural Cycle: 130
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 77.6 Intersection LOS: E
Intersection Capacity Utilization 86.2% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

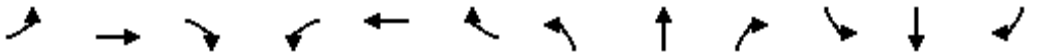
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	480	346	19	87	262	478	48	586	118	477	461	504
Future Volume (vph)	480	346	19	87	262	478	48	586	118	477	461	504
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1792	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1422
Flt Permitted	0.146			0.550			0.100			0.159		
Satd. Flow (perm)	275	1724	1168	1049	1761	1299	164	3343	0	277	1627	1422
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				389
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	490	353	19	89	267	488	49	718	0	487	470	514
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	57.5	49.5	71.0	30.9	28.0	52.5	66.5	40.1		69.0	43.2	73.3
Actuated g/C Ratio	0.38	0.33	0.47	0.21	0.19	0.35	0.44	0.27		0.46	0.29	0.49
v/c Ratio	1.20	0.62	0.03	0.34	0.81	1.08	0.15	0.80		1.21	1.01	0.58
Control Delay	150.7	44.6	0.1	38.4	68.4	93.8	40.2	59.0		159.5	95.8	5.5

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	150.7	44.6	0.1	38.4	68.4	93.8	40.2	59.0		159.5	95.8	5.5
LOS	F	D	A	D	E	F	D	E		F	F	A
Approach Delay		103.9			79.9			57.8			85.3	
Approach LOS		F			E			E			F	
Queue Length 50th (ft)	~493	284	0	51	249	239	23	333		~492	~516	34
Queue Length 95th (ft)	#851	332	0	109	243	#728	56	#473		#805	585	62
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	408	755	603	398	653	453	323	900		403	727	892
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	4	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.20	0.47	0.03	0.22	0.41	1.08	0.15	0.80		1.21	0.65	0.58

Intersection Summary

Area Type: Other

Cycle Length: 190

Actuated Cycle Length: 150.3

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 82.9 Intersection LOS: F

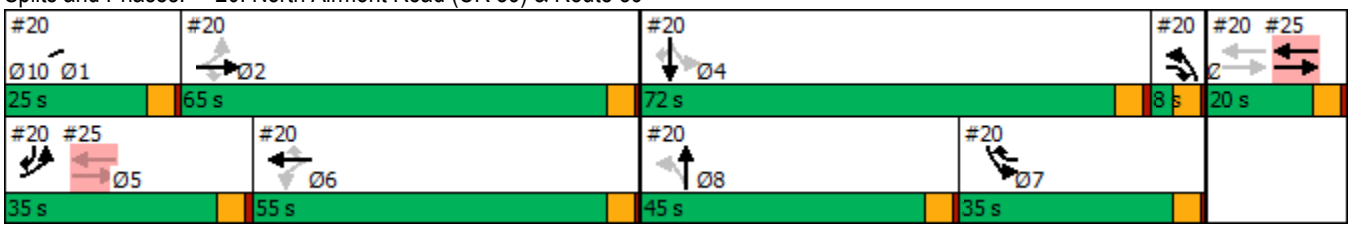
Intersection Capacity Utilization 103.4% ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

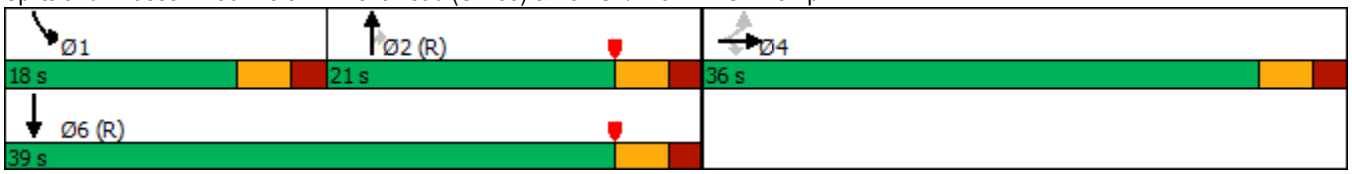
HCM 6th Edition methodology does not support clustered intersections.

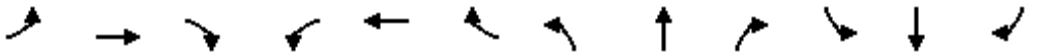
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	6	457	0	0	0	0	879	730	418	982	0
Future Volume (vph)	364	6	457	0	0	0	0	879	730	418	982	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						404			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	4%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	374	462	0	0	0	0	888	737	422	992	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		25.4	25.4					22.4	22.4	12.2	39.6	
Actuated g/C Ratio		0.34	0.34					0.30	0.30	0.16	0.53	
v/c Ratio		0.71	0.88					0.98	0.96	0.74	0.54	
Control Delay		28.5	36.0					49.7	34.3	32.7	9.6	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		28.5	36.0					49.7	34.3	32.7	9.6	
LOS		C	D					D	C	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		32.6						42.8			16.5	
Approach LOS		C						D			B	
Queue Length 50th (ft)		142	151					~256	~219	76	82	
Queue Length 95th (ft)		215	#273					#397	#420	m108	218	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					909	771	609	1842	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.58	0.75					0.98	0.96	0.69	0.54	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 31.0		Intersection LOS: C	
Intersection Capacity Utilization 90.1%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	6	457	0	0	0	0	879	730	418	982	0
Future Volume (veh/h)	364	6	457	0	0	0	0	879	730	418	982	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1859	2067	2007	0
Adj Flow Rate, veh/h	368	6	462				0	888	0	422	992	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	4	2	6	0
Cap, veh/h	561	9	493				0	866		537	1841	0
Arrive On Green	0.38	0.38	0.38				0.00	0.55	0.00	0.05	0.16	0.00
Sat Flow, veh/h	1463	24	1284				0	3226	1576	3818	3913	0
Grp Volume(v), veh/h	374	0	462				0	888	0	422	992	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1576	1909	1906	0
Q Serve(g_s), s	15.5	0.0	26.0				0.0	20.7	0.0	8.2	17.9	0.0
Cycle Q Clear(g_c), s	15.5	0.0	26.0				0.0	20.7	0.0	8.2	17.9	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	571	0	493				0	866		537	1841	0
V/C Ratio(X)	0.66	0.00	0.94				0.00	1.03		0.79	0.54	0.00
Avail Cap(c_a), veh/h	615	0	531				0	866		662	1841	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.45	0.45	0.00
Uniform Delay (d), s/veh	19.0	0.0	22.2				0.0	16.8	0.0	34.6	23.8	0.0
Incr Delay (d2), s/veh	1.7	0.0	22.9				0.0	37.2	0.0	1.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	0.0	15.6				0.0	13.4	0.0	6.4	12.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	45.2				0.0	54.1	0.0	36.4	24.4	0.0
LnGrp LOS	C	A	D				A	F		D	C	A
Approach Vol, veh/h		836						888			1414	
Approach Delay, s/veh		34.2						54.1			28.0	
Approach LOS		C						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.6	25.7		33.8		41.2
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.2	0.0		28.0		0.0
Green Ext Time (p_c), s	0.4	0.0		0.8		0.0

Intersection Summary		
HCM 6th Ctrl Delay		37.0
HCM 6th LOS		D

Notes

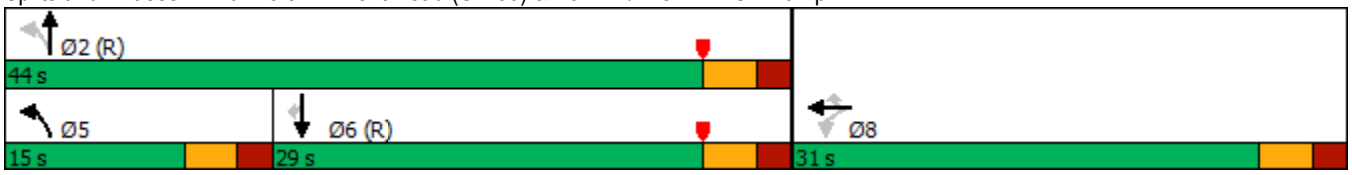
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	655	1	333	340	903	0	0	745	302
Future Volume (vph)	0	0	0	655	1	333	340	903	0	0	745	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1603	1606	1553	1355	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.129					
Satd. Flow (perm)	0	0	0	1603	1606	1553	184	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						359
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	7%	0%	4%	23%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	448	450	456	466	1237	0	0	1021	414
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				23.9	23.9	23.9	41.1	41.1			26.1	26.1
Actuated g/C Ratio				0.32	0.32	0.32	0.55	0.55			0.35	0.35
v/c Ratio				0.88	0.88	0.81	1.82	0.76			0.81	0.55
Control Delay				44.1	44.4	30.4	398.6	16.9			23.0	5.5
Queue Delay				0.0	0.0	0.0	0.0	0.0			2.2	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				44.1	44.4	30.4	398.6	16.9			25.2	6.0
LOS				D	D	C	F	B			C	A
Approach Delay					39.6			121.4			19.7	
Approach LOS					D			F			B	
Queue Length 50th (ft)				195	196	144	~313	290			162	31
Queue Length 95th (ft)				230	231	175	m#346	255			159	0
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				555	556	605	256	1634			1264	756
Starvation Cap Reductn				0	0	0	0	0			130	95
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.81	0.81	0.75	1.82	0.76			0.90	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.82			
Intersection Signal Delay: 64.2		Intersection LOS: E	
Intersection Capacity Utilization 90.1%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

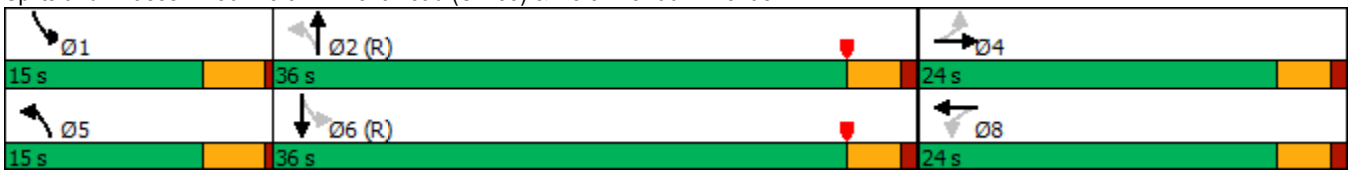
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	0	34	17	0	21	38	1495	11	23	1391	5
Future Volume (vph)	68	0	34	17	0	21	38	1495	11	23	1391	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.926			0.999			0.999	
Flt Protected		0.968			0.978		0.950			0.950		
Satd. Flow (prot)	0	1724	0	0	1671	0	1574	3321	0	1718	3290	0
Flt Permitted		0.774			0.881		0.094			0.088		
Satd. Flow (perm)	0	1379	0	0	1505	0	156	3321	0	159	3290	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		5.0			12.6			4.2			9.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	5%	0%	0%	8%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	114	0	0	42	0	42	1673	0	26	1552	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.7			11.7		56.5	53.3		55.7	50.5	
Actuated g/C Ratio		0.16			0.16		0.75	0.71		0.74	0.67	
v/c Ratio		0.41			0.14		0.14	0.71		0.08	0.70	
Control Delay		16.8			3.9		4.3	13.8		3.9	12.0	

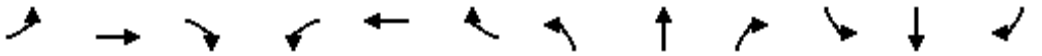
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.8			3.9		4.3	13.8		3.9	12.0	
LOS		B			A		A	B		A	B	
Approach Delay		16.8			3.9			13.6			11.8	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		17			0		4	155		2	200	
Queue Length 95th (ft)		57			12		14	#572		m7	#488	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		421			454		326	2358		347	2213	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.27			0.09		0.13	0.71		0.07	0.70	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 12.8 Intersection LOS: B
Intersection Capacity Utilization 57.3% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	0	34	17	0	21	38	1495	11	23	1391	5
Future Volume (veh/h)	68	0	34	17	0	21	38	1495	11	23	1391	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1826	1900	2057	1937	1682
Adj Flow Rate, veh/h	76	0	38	19	0	23	42	1661	12	26	1546	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	5	0	0	8	25
Cap, veh/h	199	16	68	145	25	121	432	2316	17	319	2384	9
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.66	0.66	0.11	1.00	1.00
Sat Flow, veh/h	930	129	529	584	194	941	1711	3530	25	1959	3760	15
Grp Volume(v), veh/h	114	0	0	42	0	0	42	816	857	26	756	796
Grp Sat Flow(s),veh/h/ln	1587	0	0	1719	0	0	1711	1735	1821	1959	1840	1935
Q Serve(g_s), s	3.3	0.0	0.0	0.0	0.0	0.0	0.5	22.9	22.9	0.3	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	0.0	1.6	0.0	0.0	0.5	22.9	22.9	0.3	0.0	0.0
Prop In Lane	0.67		0.33	0.45		0.55	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	283	0	0	290	0	0	432	1138	1195	319	1167	1227
V/C Ratio(X)	0.40	0.00	0.00	0.14	0.00	0.00	0.10	0.72	0.72	0.08	0.65	0.65
Avail Cap(c_a), veh/h	495	0	0	507	0	0	550	1138	1195	497	1167	1227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.2	0.0	0.0	3.2	8.4	8.4	6.5	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.0	0.8	0.0	0.0	0.4	3.9	3.7	0.4	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	0.0	0.0	1.3	0.0	0.0	0.3	12.4	12.9	0.2	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	0.0	0.0	30.0	0.0	0.0	3.5	12.3	12.1	6.9	2.8	2.7
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		114			42			1715			1578	
Approach Delay, s/veh		33.8			30.0			12.0			2.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	53.2		13.6	9.8	51.6		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	24.9		6.9	2.5	2.0		3.6				
Green Ext Time (p_c), s	0.0	6.8		1.0	0.1	25.7		0.3				

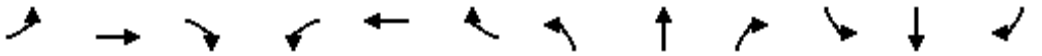
Intersection Summary												
HCM 6th Ctrl Delay			8.7									
HCM 6th LOS			A									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	24	374	14	6	13	194	756	82	33	689	93
Future Volume (vph)	103	24	374	14	6	13	194	756	82	33	689	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.985			0.982	
Flt Protected		0.961		0.950			0.950			0.950		
Satd. Flow (prot)	0	1727	1433	1797	913	1242	1645	3229	0	1762	3448	0
Flt Permitted		0.762		0.645			0.224			0.307		
Satd. Flow (perm)	0	1370	1433	1220	913	1242	388	3229	0	569	3448	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78			102		18			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	141	416	16	7	14	216	931	0	37	869	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		13.6	27.4	13.6	13.6	13.6	54.3	48.4		43.8	37.6	
Actuated g/C Ratio		0.18	0.37	0.18	0.18	0.18	0.72	0.65		0.58	0.50	
v/c Ratio		0.57	0.73	0.07	0.04	0.05	0.45	0.45		0.09	0.50	
Control Delay		36.5	23.0	24.0	23.5	0.3	8.5	7.6		6.0	15.1	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.5	23.0	24.0	23.5	0.3	8.5	7.6		6.0	15.1	
LOS		D	C	C	C	A	A	A		A	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		26.4			14.9			7.7			14.7	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)		61	129	6	3	0	26	105		4	134	
Queue Length 95th (ft)		106	190	21	12	0	77	153		16	225	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		456	573	406	304	482	478	2091		434	1738	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.31	0.73	0.04	0.02	0.03	0.45	0.45		0.09	0.50	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 55 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	24	374	14	6	13	194	756	82	33	689	93
Future Volume (veh/h)	103	24	374	14	6	13	194	756	82	33	689	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	114	27	416	16	7	14	216	840	91	37	766	103
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	376	78	532	588	190	445	388	1391	151	438	1429	192
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.16	0.93	0.93	0.04	0.42	0.42
Sat Flow, veh/h	968	262	1405	1580	635	1492	1717	2988	324	1919	3391	456
Grp Volume(v), veh/h	141	0	416	16	7	14	216	462	469	37	432	437
Grp Sat Flow(s),veh/h/ln	1230	0	1405	1580	635	1492	1717	1642	1670	1919	1914	1933
Q Serve(g_s), s	6.2	0.0	19.6	0.0	0.6	0.5	5.7	3.3	3.3	0.8	12.7	12.7
Cycle Q Clear(g_c), s	6.8	0.0	19.6	0.5	0.6	0.5	5.7	3.3	3.3	0.8	12.7	12.7
Prop In Lane	0.81		1.00	1.00		1.00	1.00		0.19	1.00		0.24
Lane Grp Cap(c), veh/h	454	0	532	588	190	445	388	765	778	438	807	815
V/C Ratio(X)	0.31	0.00	0.78	0.03	0.04	0.03	0.56	0.60	0.60	0.08	0.54	0.54
Avail Cap(c_a), veh/h	497	0	581	643	212	497	388	765	778	522	807	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	20.6	18.6	18.7	18.6	11.2	1.5	1.5	11.3	16.2	16.2
Incr Delay (d2), s/veh	0.4	0.0	6.3	0.0	0.1	0.0	1.6	3.3	3.2	0.1	2.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	11.3	0.4	0.2	0.3	3.3	2.2	2.2	0.6	9.6	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	26.9	18.6	18.7	18.7	12.8	4.8	4.7	11.3	18.8	18.7
LnGrp LOS	C	A	C	B	B	B	B	A	A	B	B	B
Approach Vol, veh/h		557			37			1147			906	
Approach Delay, s/veh		25.5			18.7			6.3			18.4	
Approach LOS		C			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	39.9		27.4	11.0	36.6		27.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	5.3		21.6	7.7	14.7		2.6				
Green Ext Time (p_c), s	0.0	3.5		0.8	0.0	2.8		0.1				

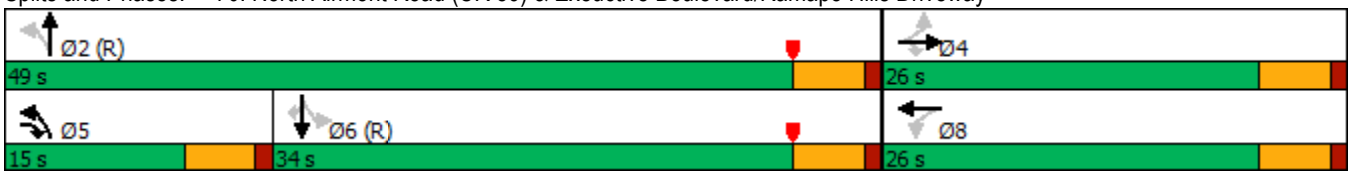
Intersection Summary			
HCM 6th Ctrl Delay		14.6	
HCM 6th LOS		B	

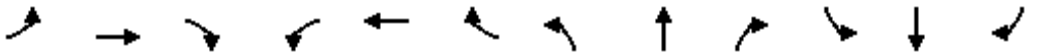
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	41	3	0	0	210	1005	21	1	1003	73
Future Volume (vph)	27	0	41	3	0	0	210	1005	21	1	1003	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		
Frt			0.850					0.997				0.850
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1589	1370	0	1805	0	1727	3333	0	1806	3492	1577
Flt Permitted							0.192			0.253		
Satd. Flow (perm)	0	1673	1370	0	1900	0	349	3333	0	481	3492	1577
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29					5				102
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		5.2			4.8			6.6			11.1	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	6%	0%	10%	0%	0%	0%	0%	7%	0%	0%	7%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	45	0	3	0	231	1127	0	1	1102	80
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	26.0	26.0	15.0	26.0	26.0		15.0	49.0		34.0	34.0	34.0
Total Split (%)	34.7%	34.7%	20.0%	34.7%	34.7%		20.0%	65.3%		45.3%	45.3%	45.3%
Maximum Green (s)	21.0	21.0	10.0	21.0	21.0		10.0	44.0		29.0	29.0	29.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		7.6	15.1		7.2		64.3	67.3		49.9	49.9	49.9
Actuated g/C Ratio		0.10	0.20		0.10		0.86	0.90		0.67	0.67	0.67
v/c Ratio		0.18	0.15		0.02		0.49	0.38		0.00	0.47	0.07
Control Delay		32.4	10.3		29.3		8.6	1.7		14.0	10.1	4.1
Queue Delay		0.0	0.0		0.0		0.3	0.0		0.0	0.1	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		32.4	10.3		29.3		8.9	1.7		14.0	10.2	4.1
LOS		C	B		C		A	A		B	B	A
Approach Delay		19.1			29.3			2.9			9.8	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)		13	7		1		12	0		0	40	0
Queue Length 95th (ft)		36	23		9		m54	90		m0	286	m18
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		468	337		532		511	2989		319	2323	1083
Starvation Cap Reductn		0	0		0		46	266		0	0	0
Spillback Cap Reductn		0	1		0		0	0		0	244	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.06	0.13		0.01		0.50	0.41		0.00	0.53	0.07

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 44 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 6.5		Intersection LOS: A	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	0	41	3	0	0	210	1005	21	1	1003	73
Future Volume (veh/h)	27	0	41	3	0	0	210	1005	21	1	1003	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1752	1900	1900	1900	1876	1773	1876	2175	2070	2085
Adj Flow Rate, veh/h	30	0	45	3	0	0	231	1104	23	1	1102	80
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	0	10	0	0	0	0	7	0	0	7	6
Cap, veh/h	174	0	179	180	0	0	501	2743	57	491	2672	1199
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.00	0.13	1.00	1.00	0.68	0.68	0.68
Sat Flow, veh/h	1451	0	1485	1576	0	0	1787	3374	70	581	3933	1766
Grp Volume(v), veh/h	30	0	45	3	0	0	231	551	576	1	1102	80
Grp Sat Flow(s),veh/h/ln	1451	0	1485	1576	0	0	1787	1684	1760	581	1967	1766
Q Serve(g_s), s	1.4	0.0	2.1	0.0	0.0	0.0	2.8	0.0	0.0	0.0	9.4	1.1
Cycle Q Clear(g_c), s	1.5	0.0	2.1	0.1	0.0	0.0	2.8	0.0	0.0	0.0	9.4	1.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	174	0	179	180	0	0	501	1369	1431	491	2672	1199
V/C Ratio(X)	0.17	0.00	0.25	0.02	0.00	0.00	0.46	0.40	0.40	0.00	0.41	0.07
Avail Cap(c_a), veh/h	500	0	515	506	0	0	619	1369	1431	491	2672	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.55	0.55	0.55	0.80	0.80	0.80
Uniform Delay (d), s/veh	34.3	0.0	29.9	33.6	0.0	0.0	3.5	0.0	0.0	3.9	5.4	4.0
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.0	0.0	0.0	0.4	0.5	0.5	0.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	1.4	0.1	0.0	0.0	0.9	0.3	0.3	0.0	5.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	30.6	33.7	0.0	0.0	3.8	0.5	0.5	3.9	5.7	4.1
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		75			3			1358			1183	
Approach Delay, s/veh		32.3			33.7			1.0			5.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		66.0		9.0	10.0	55.9		9.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		44.0		21.0	10.0	29.0		21.0				
Max Q Clear Time (g_c+I1), s		2.0		4.1	4.8	11.4		2.1				
Green Ext Time (p_c), s		4.6		0.2	0.3	5.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.0									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	11	435	17	10	503
Future Vol, veh/h	8	11	435	17	10	503
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	8	0	0	7
Mvmt Flow	13	17	690	27	16	798

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1534	704	0	0	717	0
Stage 1	704	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	256	515	-	-	893	-
Stage 1	676	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	248	515	-	-	893	-
Mov Cap-2 Maneuver	248	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	604	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	354	893	-
HCM Lane V/C Ratio	-	-	0.085	0.018	-
HCM Control Delay (s)	-	-	16.1	9.1	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	696	19	79	735	8	149
Future Vol, veh/h	696	19	79	735	8	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	11	7	17	3
Mvmt Flow	725	20	82	766	8	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	745	0	1665	735
Stage 1	-	-	-	-	735	-
Stage 2	-	-	-	-	930	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	823	-	142	453
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	444	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	823	-	128	453
Mov Cap-2 Maneuver	-	-	-	-	265	-
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	400	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	437	-	-	823	-
HCM Lane V/C Ratio	0.374	-	-	0.1	-
HCM Control Delay (s)	18.1	-	-	9.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.7	-	-	0.3	-

Intersection	
Int Delay, s/veh	37.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	146	204	243	74	2	89	1	174	2	2	0
Future Vol, veh/h	0	146	204	243	74	2	89	1	174	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	203	283	338	103	3	124	1	242	3	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	106	0	0	486	0	0	1127	1127	345	1247	1267	105
Stage 1	-	-	-	-	-	-	345	345	-	781	781	-
Stage 2	-	-	-	-	-	-	782	782	-	466	486	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1498	-	-	1046	-	-	223	265	702	174	196	961
Stage 1	-	-	-	-	-	-	702	691	-	426	445	-
Stage 2	-	-	-	-	-	-	443	485	-	612	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1498	-	-	1046	-	-	161	174	702	83	129	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	161	174	-	83	129	-
Stage 1	-	-	-	-	-	-	702	691	-	426	292	-
Stage 2	-	-	-	-	-	-	288	319	-	401	585	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.7	122.7	42.7
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	327	1498	-	-	1046	-	-	101
HCM Lane V/C Ratio	1.121	-	-	-	0.323	-	-	0.055
HCM Control Delay (s)	122.7	0	-	-	10.1	0	-	42.7
HCM Lane LOS	F	A	-	-	B	A	-	E
HCM 95th %tile Q(veh)	14.5	0	-	-	1.4	-	-	0.2

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	19	0	0	12	22	1560	2	5	1400	34
Future Vol, veh/h	37	0	19	0	0	12	22	1560	2	5	1400	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	67	0	40	0	0	88	33	6	50	25	7	50
Mvmt Flow	39	0	20	0	0	13	23	1642	2	5	1474	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2369	3192	755	2436	3209	822	1510	0	0	1644	0	0
Stage 1	1502	1502	-	1689	1689	-	-	-	-	-	-	-
Stage 2	867	1690	-	747	1520	-	-	-	-	-	-	-
Critical Hdwy	9.24	6.9	7.9	7.5	6.5	8.66	4.76	-	-	4.6	-	-
Critical Hdwy Stg 1	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.17	4	3.7	3.5	4	4.18	2.53	-	-	2.45	-	-
Pot Cap-1 Maneuver	*86	0	*437	*103	0	*354	*640	-	-	*604	-	-
Stage 1	*59	158	-	*99	151	-	-	-	-	-	-	-
Stage 2	*188	125	-	*376	183	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*80	0	*437	*95	0	*354	*640	-	-	*604	-	-
Mov Cap-2 Maneuver	*80	0	-	*95	0	-	-	-	-	-	-	-
Stage 1	*57	157	-	*95	146	-	-	-	-	-	-	-
Stage 2	*175	121	-	*356	182	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	62	15.5	0.2	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 640	-	-	80	437	354	* 604	-	-
HCM Lane V/C Ratio	0.036	-	-	0.487	0.046	0.036	0.009	-	-
HCM Control Delay (s)	10.8	-	-	86.8	13.6	15.5	11	-	-
HCM Lane LOS	B	-	-	F	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2	0.1	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	2	10	0	0	0	11	233	57	50	419	5
Future Vol, veh/h	10	2	10	0	0	0	11	233	57	50	419	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	10	4	17	35	13	0
Mvmt Flow	15	3	15	0	0	0	17	353	86	76	635	8

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	1221	1264	639			643	0	0	439	0	0
Stage 1	791	791	-			-	-	-	-	-	-
Stage 2	430	473	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.2	-	-	4.45	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.29	-	-	2.515	-	-
Pot Cap-1 Maneuver	200	171	480			905	-	-	966	-	-
Stage 1	450	404	-			-	-	-	-	-	-
Stage 2	660	562	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	171	0	480			905	-	-	966	-	-
Mov Cap-2 Maneuver	171	0	-			-	-	-	-	-	-
Stage 1	439	0	-			-	-	-	-	-	-
Stage 2	579	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.8	0.3	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	905	-	-	171	480	966	-	-
HCM Lane V/C Ratio	0.018	-	-	0.089	0.038	0.078	-	-
HCM Control Delay (s)	9.1	0	-	28.1	12.8	9	0	-
HCM Lane LOS	A	A	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	21	243	0	0	449
Future Vol, veh/h	25	21	243	0	0	449
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	70	47	6	0	0	10
Mvmt Flow	33	28	324	0	0	599

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	923	324	0	0	324	0
Stage 1	324	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Critical Hdwy	6.7	6.47	-	-	4.1	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	4.13	3.723	-	-	2.2	-
Pot Cap-1 Maneuver	254	636	-	-	1247	-
Stage 1	625	-	-	-	-	-
Stage 2	467	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	254	636	-	-	1247	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	467	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	350	1247	-
HCM Lane V/C Ratio	-	-	0.175	-	-
HCM Control Delay (s)	-	-	17.5	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	300	22	9	275	44	48
Future Vol, veh/h	300	22	9	275	44	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	9	15	50	14	5	16
Mvmt Flow	441	32	13	404	65	71

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	473	0	887	457
Stage 1	-	-	-	-	457	-
Stage 2	-	-	-	-	430	-
Critical Hdwy	-	-	4.6	-	7.25	6.76
Critical Hdwy Stg 1	-	-	-	-	6.25	-
Critical Hdwy Stg 2	-	-	-	-	6.25	-
Follow-up Hdwy	-	-	2.65	-	3.545	3.444
Pot Cap-1 Maneuver	-	-	879	-	255	547
Stage 1	-	-	-	-	570	-
Stage 2	-	-	-	-	590	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	879	-	250	547
Mov Cap-2 Maneuver	-	-	-	-	250	-
Stage 1	-	-	-	-	570	-
Stage 2	-	-	-	-	579	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	21.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	349	-	-	879	-
HCM Lane V/C Ratio	0.388	-	-	0.015	-
HCM Control Delay (s)	21.7	-	-	9.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.8	-	-	0	-

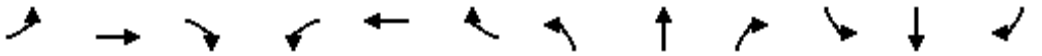
Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	277	71	69	244	40	37
Future Vol, veh/h	277	71	69	244	40	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	18	5	18	16	21
Mvmt Flow	322	83	80	284	47	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	405	0	808	364
Stage 1	-	-	-	-	364	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	-	-	4.15	-	5.36	5.81
Critical Hdwy Stg 1	-	-	-	-	4.36	-
Critical Hdwy Stg 2	-	-	-	-	4.36	-
Follow-up Hdwy	-	-	2.245	-	3.644	3.489
Pot Cap-1 Maneuver	-	-	1138	-	434	680
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1138	-	398	680
Mov Cap-2 Maneuver	-	-	-	-	398	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	657	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	497	-	-	1138	-
HCM Lane V/C Ratio	0.18	-	-	0.071	-
HCM Control Delay (s)	13.8	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	603	110	89	697	105	177	178	109	184	195	194
Future Volume (vph)	220	603	110	89	697	105	177	178	109	184	195	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.943			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1646	1766	1516	1752	1810	1568	1919	1724	0	1847	1756	0
Flt Permitted	0.104			0.153			0.253			0.252		
Satd. Flow (perm)	180	1766	1516	282	1810	1568	511	1724	0	489	1756	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		26			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	4%	3%	3%	5%	3%	5%	5%	4%	3%	6%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	227	622	113	92	719	108	182	296	0	190	401	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.8	39.2	53.5	41.2	34.7	49.2	24.6	15.8		24.9	16.0	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.53	0.26	0.17		0.27	0.17	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.99	0.84	0.12	0.40	1.07	0.12	0.69	0.95		0.74	1.20	
Control Delay	82.8	38.9	1.1	18.3	86.0	0.9	38.9	75.9		43.1	148.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	82.8	38.9	1.1	18.3	86.0	0.9	38.9	75.9		43.1	148.8	
LOS	F	D	A	B	F	A	D	E		D	F	
Approach Delay		44.8			69.2			61.8			114.9	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	85	320	0	24	~451	0	77	~162		81	~275	
Queue Length 95th (ft)	#306	#635	10	68	#828	8	#152	#296		#175	#447	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	229	738	940	272	670	903	271	312		261	333	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.99	0.84	0.12	0.34	1.07	0.12	0.67	0.95		0.73	1.20	

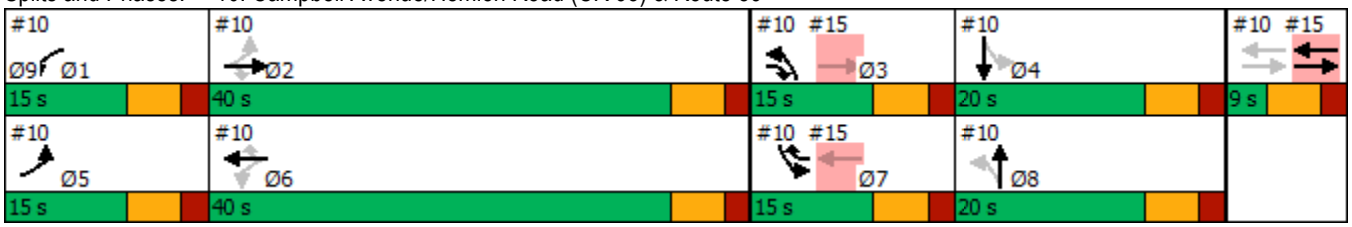
Intersection Summary

Area Type: Other
Cycle Length: 99
Actuated Cycle Length: 93.7
Natural Cycle: 130
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.20
Intersection Signal Delay: 69.2 Intersection LOS: E
Intersection Capacity Utilization 100.8% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

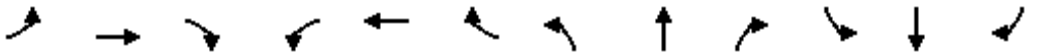
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	493	430	73	139	376	533	61	474	160	432	614	608
Future Volume (vph)	493	430	73	139	376	533	61	474	160	432	614	608
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1758	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1463
Flt Permitted	0.103			0.333			0.100			0.185		
Satd. Flow (perm)	191	1808	1424	640	1828	1398	171	3279	0	331	1739	1463
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					22				243
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	508	443	75	143	388	549	63	654	0	445	633	627
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	69.0	57.8	56.1	45.5	39.4	63.9	44.1	40.2		75.4	66.5	96.6
Actuated g/C Ratio	0.43	0.36	0.35	0.28	0.24	0.39	0.27	0.25		0.47	0.41	0.60

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.36	0.69	0.13	0.54	0.87	0.99	0.78	0.79		1.09	0.89	0.65
Control Delay	218.1	47.5	2.2	40.2	72.8	64.9	99.6	63.6		122.1	60.7	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	8.0	0.0
Total Delay	218.1	47.5	2.2	40.2	72.8	64.9	99.6	63.6		122.1	68.6	10.9
LOS	F	D	A	D	E	E	F	E		F	E	B
Approach Delay		128.6			64.5			66.8			61.4	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	~624	387	0	85	390	277	35	324		~407	597	182
Queue Length 95th (ft)	#1008	422	14	161	358	#629	#128	#469		#764	#994	267
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	373	735	558	360	630	552	81	831		409	723	971
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	68	1
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.36	0.60	0.13	0.40	0.62	0.99	0.78	0.79		1.09	0.97	0.65

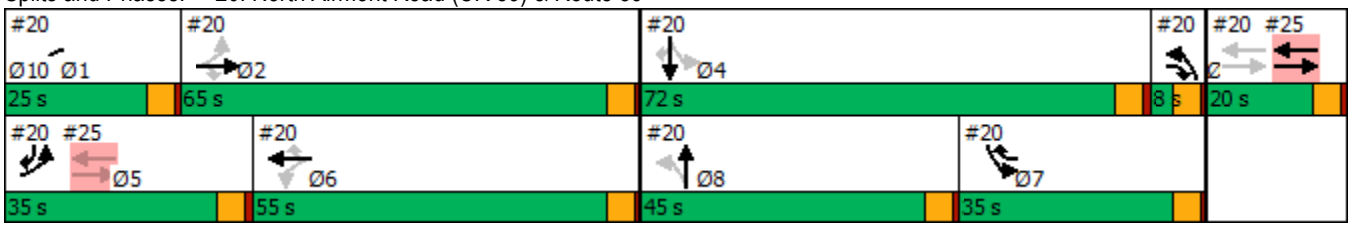
Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 161.8
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 78.2 Intersection LOS: E
Intersection Capacity Utilization 113.5% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

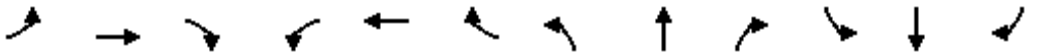
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

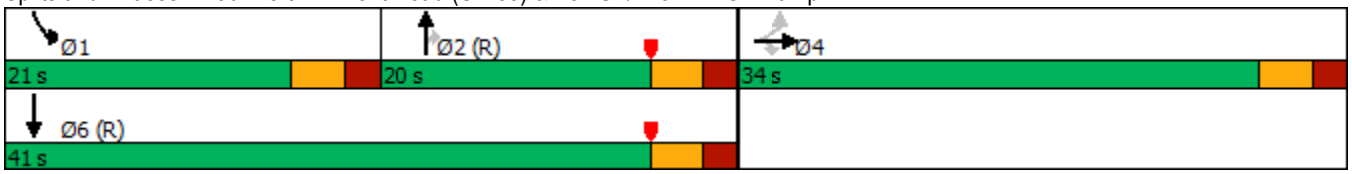


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	289	3	329	0	0	0	0	831	751	487	1338	0
Future Volume (vph)	289	3	329	0	0	0	0	831	751	487	1338	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1472	0	0	0	0	3183	1632	3485	3558	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1472	0	0	0	0	3183	1610	3482	3558	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						433			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	7%	0%	0%	0%	0%	8%	4%	3%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	295	332	0	0	0	0	839	759	492	1352	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		19.1	19.1					26.6	26.6	14.2	45.9	
Actuated g/C Ratio		0.25	0.25					0.35	0.35	0.19	0.61	
v/c Ratio		0.75	0.74					0.74	0.89	0.74	0.62	
Control Delay		36.9	26.8					23.1	20.0	28.8	4.6	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		36.9	26.8					23.1	20.0	28.8	4.7	
LOS		D	C					C	C	C	A	
Approach Delay		31.6						21.6			11.1	
Approach LOS		C						C			B	
Queue Length 50th (ft)		126	98					92	26	81	0	
Queue Length 95th (ft)		181	162					#350	#416	m133	m223	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	631					1130	851	743	2176	
Starvation Cap Reductn		0	0					0	0	0	162	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.49	0.53					0.74	0.89	0.66	0.67	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 18.4		Intersection LOS: B	
Intersection Capacity Utilization 122.3%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	3	329	0	0	0	0	831	751	487	1338	0
Future Volume (veh/h)	289	3	329	0	0	0	0	831	751	487	1338	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1649				0	1728	1859	2052	2037	0
Adj Flow Rate, veh/h	292	3	332				0	839	0	492	1352	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	7				0	8	4	3	4	0
Cap, veh/h	446	5	377				0	1211		613	2310	0
Arrive On Green	0.27	0.27	0.27				0.00	0.74	0.00	0.11	0.40	0.00
Sat Flow, veh/h	1653	17	1397				0	3370	1576	3791	3971	0
Grp Volume(v), veh/h	295	0	332				0	839	0	492	1352	0
Grp Sat Flow(s),veh/h/ln	1670	0	1397				0	1642	1576	1895	1935	0
Q Serve(g_s), s	11.8	0.0	17.1				0.0	10.3	0.0	9.5	20.5	0.0
Cycle Q Clear(g_c), s	11.8	0.0	17.1				0.0	10.3	0.0	9.5	20.5	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	450	0	377				0	1211		613	2310	0
V/C Ratio(X)	0.66	0.00	0.88				0.00	0.69		0.80	0.59	0.00
Avail Cap(c_a), veh/h	646	0	540				0	1211		809	2310	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.22	0.22	0.00
Uniform Delay (d), s/veh	24.3	0.0	26.2				0.0	7.6	0.0	32.3	15.2	0.0
Incr Delay (d2), s/veh	0.6	0.0	8.8				0.0	3.3	0.0	0.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	0.0	10.4				0.0	4.6	0.0	6.1	11.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	0.0	35.1				0.0	10.9	0.0	33.0	15.5	0.0
LnGrp LOS	C	A	D				A	B		C	B	A
Approach Vol, veh/h		627						839			1844	
Approach Delay, s/veh		30.3						10.9			20.1	
Approach LOS		C						B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.1	32.6		25.2		49.8
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	11.5	0.0		19.1		0.0
Green Ext Time (p_c), s	0.6	0.0		1.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

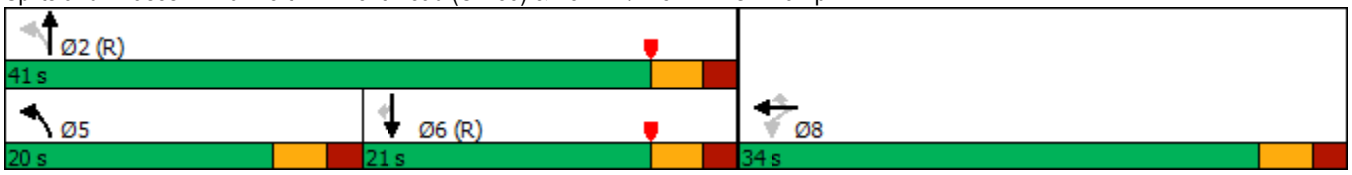
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	844	2	480	405	715	0	0	981	449
Future Volume (vph)	0	0	0	844	2	480	405	715	0	0	981	449
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1665	1670	1583	1488	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.155					
Satd. Flow (perm)	0	0	0	1665	1670	1583	243	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						147						350
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	2%	12%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	430	433	490	413	730	0	0	1001	458
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.2	24.2	24.2	40.8	40.8			20.8	20.8
Actuated g/C Ratio				0.32	0.32	0.32	0.54	0.54			0.28	0.28
v/c Ratio				0.80	0.80	0.80	1.08	0.44			1.01	0.68
Control Delay				34.6	34.8	26.2	81.2	4.5			61.8	22.5
Queue Delay				0.0	0.0	0.4	0.0	0.0			34.0	0.6

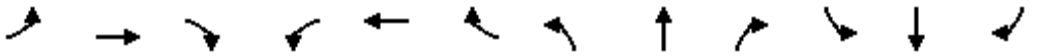
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.6	34.8	26.6	81.2	4.5			95.8	23.1
LOS				C	C	C	F	A			F	C
Approach Delay					31.8			32.2			73.0	
Approach LOS					C			C			E	
Queue Length 50th (ft)				184	186	142	~177	31			~291	125
Queue Length 95th (ft)				273	275	240	m#311	20			#460	#251
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				643	645	702	381	1666			996	670
Starvation Cap Reductn				0	0	0	0	0			90	44
Spillback Cap Reductn				0	0	31	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.67	0.67	0.73	1.08	0.44			1.10	0.73

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 47.1		Intersection LOS: D	
Intersection Capacity Utilization 122.3%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



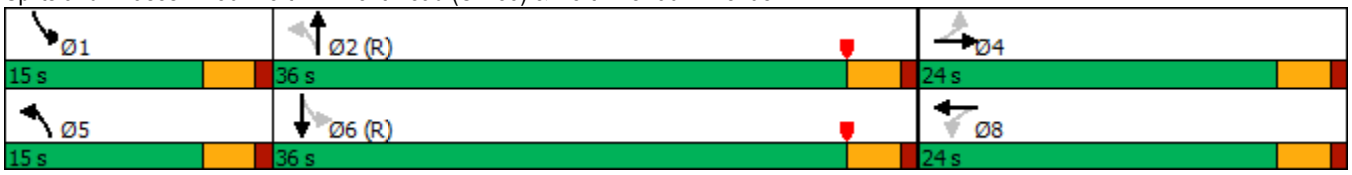
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	2	32	60	2	63	41	1389	70	68	1562	12
Future Volume (vph)	68	2	32	60	2	63	41	1389	70	68	1562	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.993			0.999	
Flt Protected		0.968			0.976		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1844	0	1589	3308	0	1718	3420	0
Flt Permitted		0.701			0.818		0.091			0.087		
Satd. Flow (perm)	0	1292	0	0	1545	0	152	3308	0	157	3420	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			66			8			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		4.1			10.5			4.2			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	5%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	135	0	45	1586	0	74	1711	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		12.9			12.9		53.6	46.4		54.7	49.3	
Actuated g/C Ratio		0.17			0.17		0.71	0.62		0.73	0.66	
v/c Ratio		0.45			0.42		0.15	0.77		0.23	0.76	
Control Delay		26.2			18.8		5.0	19.0		9.4	14.6	

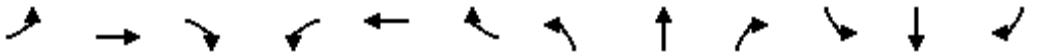
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.2			18.8		5.0	19.0		9.4	14.6	
LOS		C			B		A	B		A	B	
Approach Delay		26.2			18.8			18.6			14.4	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		34			28		5	314		8	182	
Queue Length 95th (ft)		75			71		15	#552		m30	#582	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		366			460		320	2048		344	2248	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.30			0.29		0.14	0.77		0.22	0.76	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 16.8 Intersection LOS: B
Intersection Capacity Utilization 70.4% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	2	32	60	2	63	41	1389	70	68	1562	12
Future Volume (veh/h)	68	2	32	60	2	63	41	1389	70	68	1562	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1826	1900	2057	1997	2057
Adj Flow Rate, veh/h	74	2	35	65	2	68	45	1510	76	74	1698	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	5	0	0	4	0
Cap, veh/h	211	21	70	162	21	113	360	2026	102	399	2418	18
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.14	0.83	0.83
Sat Flow, veh/h	991	155	528	685	158	855	1725	3362	169	1959	3860	30
Grp Volume(v), veh/h	111	0	0	135	0	0	45	777	809	74	834	877
Grp Sat Flow(s),veh/h/ln	1674	0	0	1697	0	0	1725	1735	1796	1959	1897	1992
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.6	24.2	24.5	0.8	13.3	13.3
Cycle Q Clear(g_c), s	4.2	0.0	0.0	5.2	0.0	0.0	0.6	24.2	24.5	0.8	13.3	13.3
Prop In Lane	0.67		0.32	0.48		0.50	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	302	0	0	296	0	0	360	1045	1082	399	1188	1248
V/C Ratio(X)	0.37	0.00	0.00	0.46	0.00	0.00	0.13	0.74	0.75	0.19	0.70	0.70
Avail Cap(c_a), veh/h	502	0	0	505	0	0	473	1045	1082	481	1188	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	30.4	0.0	0.0	4.9	10.7	10.8	8.0	3.4	3.5
Incr Delay (d2), s/veh	2.7	0.0	0.0	3.9	0.0	0.0	0.6	4.8	4.7	0.8	3.5	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	0.0	4.6	0.0	0.0	0.4	13.9	14.4	0.8	6.2	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	0.0	34.4	0.0	0.0	5.5	15.5	15.5	8.8	6.9	6.8
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		111			135			1631			1785	
Approach Delay, s/veh		32.7			34.4			15.2			6.9	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	49.2		13.9	10.1	51.0		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	26.5		6.2	2.6	15.3		7.2				
Green Ext Time (p_c), s	0.2	5.3		0.9	0.1	15.7		1.2				

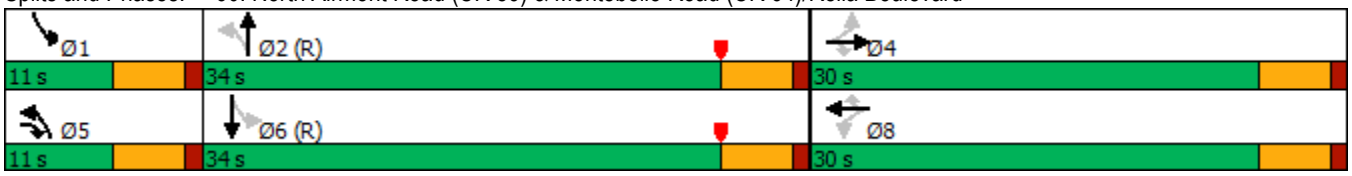
Intersection Summary												
HCM 6th Ctrl Delay			12.4									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	9	248	94	35	74	304	826	49	36	982	124
Future Volume (vph)	133	9	248	94	35	74	304	826	49	36	982	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.992			0.983	
Flt Protected		0.955		0.950			0.950			0.950		
Satd. Flow (prot)	0	1666	1433	1762	1723	1553	1710	3355	0	1745	3544	0
Flt Permitted		0.712		0.643			0.123			0.310		
Satd. Flow (perm)	0	1242	1433	1193	1723	1553	221	3355	0	570	3544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			102		9			21	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	261	99	37	78	320	921	0	38	1165	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		14.8	37.6	14.8	14.8	14.8	49.7	43.1		33.8	27.4	
Actuated g/C Ratio		0.20	0.50	0.20	0.20	0.20	0.66	0.57		0.45	0.37	
v/c Ratio		0.61	0.36	0.42	0.11	0.20	0.64	0.48		0.11	0.89	
Control Delay		37.3	12.3	30.6	23.3	4.4	25.9	12.1		7.1	31.7	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		37.3	12.3	30.6	23.3	4.4	25.9	12.1		7.1	31.7	
LOS		D	B	C	C	A	C	B		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		21.4			19.8			15.7			31.0	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)		64	64	41	14	0	81	144		5	248	
Queue Length 95th (ft)		109	117	76	34	21	#265	202		18	#339	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		414	732	397	574	585	499	1932		357	1383	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.36	0.36	0.25	0.06	0.13	0.64	0.48		0.11	0.84	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 22.7		Intersection LOS: C	
Intersection Capacity Utilization 74.9%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	9	248	94	35	74	304	826	49	36	982	124
Future Volume (veh/h)	133	9	248	94	35	74	304	826	49	36	982	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	140	9	261	99	37	78	320	869	52	38	1034	131
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	318	17	400	468	419	371	386	1819	109	459	1788	226
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.74	0.74	0.04	0.52	0.52
Sat Flow, veh/h	1097	85	1405	1583	2046	1810	1773	3256	195	1904	3471	439
Grp Volume(v), veh/h	149	0	261	99	37	78	320	453	468	38	579	586
Grp Sat Flow(s),veh/h/ln	1182	0	1405	1583	2046	1810	1773	1698	1752	1904	1944	1967
Q Serve(g_s), s	8.0	0.0	12.2	0.0	1.1	2.7	6.0	8.0	8.0	0.7	15.4	15.4
Cycle Q Clear(g_c), s	9.1	0.0	12.2	3.1	1.1	2.7	6.0	8.0	8.0	0.7	15.4	15.4
Prop In Lane	0.94		1.00	1.00		1.00	1.00		0.11	1.00		0.22
Lane Grp Cap(c), veh/h	335	0	400	468	419	371	386	949	979	459	1001	1013
V/C Ratio(X)	0.44	0.00	0.65	0.21	0.09	0.21	0.83	0.48	0.48	0.08	0.58	0.58
Avail Cap(c_a), veh/h	497	0	581	672	682	603	386	949	979	542	1001	1013
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	23.6	25.0	24.1	24.8	13.7	5.3	5.3	7.9	12.6	12.6
Incr Delay (d2), s/veh	0.9	0.0	1.8	0.2	0.1	0.3	12.7	1.6	1.5	0.1	2.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.4	0.0	7.4	2.7	1.0	2.1	6.6	4.3	4.4	0.5	10.8	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	0.0	25.3	25.2	24.2	25.1	26.4	6.8	6.8	7.9	15.0	15.0
LnGrp LOS	C	A	C	C	C	C	C	A	A	A	B	B
Approach Vol, veh/h		410			214			1241			1203	
Approach Delay, s/veh		26.5			25.0			11.9			14.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	46.9		20.4	11.0	43.6		20.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.7	10.0		14.2	8.0	17.4		5.1				
Green Ext Time (p_c), s	0.0	3.2		1.1	0.0	3.7		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		15.9	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	0	138	16	0	4	80	1096	19	5	1276	43
Future Volume (vph)	79	0	138	16	0	4	80	1096	19	5	1276	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		0.98
Frt			0.850		0.974			0.997				0.850
Flt Protected		0.950			0.961		0.950			0.950		
Satd. Flow (prot)	0	1604	1507	0	1778	0	1661	3427	0	1806	3593	1623
Flt Permitted		0.744			0.741		0.122			0.244		
Satd. Flow (perm)	0	1257	1507	0	1371	0	213	3427	0	464	3593	1587
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29		102			4				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%	4%	4%	0%	0%	4%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	82	144	0	21	0	83	1162	0	5	1329	45
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	50.0		35.0	35.0	35.0
Total Split (%)	33.3%	33.3%	20.0%	33.3%	33.3%		20.0%	66.7%		46.7%	46.7%	46.7%
Maximum Green (s)	20.0	20.0	10.0	20.0	20.0		10.0	45.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	0
Act Effct Green (s)		10.5	20.3		10.5		56.7	57.7		44.7	44.7	44.7
Actuated g/C Ratio		0.14	0.27		0.14		0.76	0.77		0.60	0.60	0.60

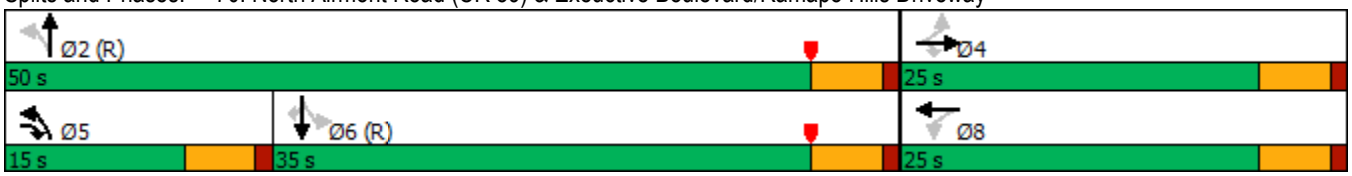
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.47	0.34		0.08		0.28	0.44		0.02	0.62	0.05
Control Delay		37.3	17.1		0.6		8.6	6.4		3.4	5.8	0.3
Queue Delay		0.0	1.9		0.2		0.0	0.5		0.0	1.4	0.0
Total Delay		37.3	19.0		0.8		8.6	6.9		3.4	7.2	0.3
LOS		D	B		A		A	A		A	A	A
Approach Delay		25.6			0.8			7.0			6.9	
Approach LOS		C			A			A			A	
Queue Length 50th (ft)		36	40		0		8	78		0	26	0
Queue Length 95th (ft)		72	74		0		m36	191		m1	361	m1
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		335	488		440		353	2636		276	2139	986
Starvation Cap Reductn		0	0		0		0	901		0	0	0
Spillback Cap Reductn		0	221		218		0	0		0	565	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.24	0.54		0.09		0.24	0.67		0.02	0.84	0.05

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 8 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 8.4 Intersection LOS: A
Intersection Capacity Utilization 60.5% ICU Level of Service B
Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	0	138	16	0	4	80	1096	19	5	1276	43
Future Volume (veh/h)	79	0	138	16	0	4	80	1096	19	5	1276	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1900	1900	1900	1900	1817	1817	1876	2175	2115	2130
Adj Flow Rate, veh/h	82	0	144	17	0	4	83	1142	20	5	1329	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	0	0	0	4	4	0	0	4	3
Cap, veh/h	265	0	274	229	9	36	370	2609	46	450	2532	1136
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.07	1.00	1.00	0.63	0.63	0.63
Sat Flow, veh/h	1468	0	1610	1236	81	310	1731	3472	61	562	4019	1804
Grp Volume(v), veh/h	82	0	144	21	0	0	83	568	594	5	1329	45
Grp Sat Flow(s),veh/h/ln	1468	0	1610	1627	0	0	1731	1726	1806	562	2010	1804
Q Serve(g_s), s	3.0	0.0	6.1	0.0	0.0	0.0	1.1	0.0	0.0	0.2	13.7	0.7
Cycle Q Clear(g_c), s	3.8	0.0	6.1	0.8	0.0	0.0	1.1	0.0	0.0	0.2	13.7	0.7
Prop In Lane	1.00		1.00	0.81		0.19	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	265	0	274	274	0	0	370	1297	1357	450	2532	1136
V/C Ratio(X)	0.31	0.00	0.53	0.08	0.00	0.00	0.22	0.44	0.44	0.01	0.52	0.04
Avail Cap(c_a), veh/h	482	0	518	497	0	0	506	1297	1357	450	2532	1136
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.78	0.78	0.78	0.55	0.55	0.55
Uniform Delay (d), s/veh	31.0	0.0	28.4	29.7	0.0	0.0	5.2	0.0	0.0	5.2	7.7	5.3
Incr Delay (d2), s/veh	0.7	0.0	1.6	0.1	0.0	0.0	0.2	0.8	0.8	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	4.4	0.6	0.0	0.0	0.5	0.6	0.6	0.0	7.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	0.0	29.9	29.8	0.0	0.0	5.5	0.8	0.8	5.2	8.1	5.3
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		226			21			1245			1379	
Approach Delay, s/veh		30.5			29.8			1.1			8.0	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		61.4		13.6	9.1	52.2		13.6				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		45.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s		2.0		8.1	3.1	15.7		2.8				
Green Ext Time (p_c), s		4.8		0.6	0.1	5.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			7.0									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	19	491	9	5	525
Future Vol, veh/h	30	19	491	9	5	525
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	5	0	0	6
Mvmt Flow	36	23	592	11	6	633

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1243	598	0	0	603	0
Stage 1	598	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	338	578	-	-	984	-
Stage 1	722	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	335	578	-	-	984	-
Mov Cap-2 Maneuver	335	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	695	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	400	984	-
HCM Lane V/C Ratio	-	-	0.148	0.006	-
HCM Control Delay (s)	-	-	15.6	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	878	18	178	867	24	118
Future Vol, veh/h	878	18	178	867	24	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	7	6	4	0	7
Mvmt Flow	934	19	189	922	26	126

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	953	0	2244	944
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	1300	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	705	-	77	346
Stage 1	-	-	-	-	470	-
Stage 2	-	-	-	-	344	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	705	-	56	346
Mov Cap-2 Maneuver	-	-	-	-	173	-
Stage 1	-	-	-	-	470	-
Stage 2	-	-	-	-	252	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	29.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	296	-	-	705	-
HCM Lane V/C Ratio	0.51	-	-	0.269	-
HCM Control Delay (s)	29.2	-	-	12	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.7	-	-	1.1	-

Intersection	
Int Delay, s/veh	26.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	81	134	198	157	6	169	9	234	3	4	3
Future Vol, veh/h	0	81	134	198	157	6	169	9	234	3	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	91	151	222	176	7	190	10	263	3	4	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	183	0	0	242	0	0	794	794	167	927	866	180
Stage 1	-	-	-	-	-	-	167	167	-	624	624	-
Stage 2	-	-	-	-	-	-	627	627	-	303	242	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1404	-	-	1296	-	-	362	385	883	278	295	877
Stage 1	-	-	-	-	-	-	862	793	-	511	475	-
Stage 2	-	-	-	-	-	-	538	551	-	735	683	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1404	-	-	1296	-	-	303	311	883	163	239	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	303	311	-	163	239	-
Stage 1	-	-	-	-	-	-	862	793	-	511	384	-
Stage 2	-	-	-	-	-	-	428	446	-	510	683	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.6	60.1	19.5
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	484	1404	-	-	1296	-	-	259
HCM Lane V/C Ratio	0.956	-	-	-	0.172	-	-	0.043
HCM Control Delay (s)	60.1	0	-	-	8.4	0	-	19.5
HCM Lane LOS	F	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	11.9	0	-	-	0.6	-	-	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	0	46	0	0	16	17	1501	2	3	1596	68
Future Vol, veh/h	65	0	46	0	0	16	17	1501	2	3	1596	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	22	0	12	0	0	31	17	6	50	100	4	34
Mvmt Flow	71	0	51	0	0	18	19	1649	2	3	1754	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2661	3487	915	2571	3523	826	1829	0	0	1651	0	0
Stage 1	1798	1798	-	1688	1688	-	-	-	-	-	-	-
Stage 2	863	1689	-	883	1835	-	-	-	-	-	-	-
Critical Hdwy	8.34	6.9	7.34	7.5	6.5	7.52	4.44	-	-	6.1	-	-
Critical Hdwy Stg 1	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.72	4	3.42	3.5	4	3.61	2.37	-	-	3.2	-	-
Pot Cap-1 Maneuver	*97	0	*392	*103	0	*410	*566	-	-	*463	-	-
Stage 1	*~ 54	109	-	*99	151	-	-	-	-	-	-	-
Stage 2	*252	125	-	*311	128	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*90	0	*392	*87	0	*410	*566	-	-	*463	-	-
Mov Cap-2 Maneuver	*90	0	-	*87	0	-	-	-	-	-	-	-
Stage 1	*~ 52	108	-	*96	146	-	-	-	-	-	-	-
Stage 2	*233	121	-	*269	127	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	80.7	14.2	0.1	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 566	-	-	90	392	410	* 463	-	-
HCM Lane V/C Ratio	0.033	-	-	0.794	0.129	0.043	0.007	-	-
HCM Control Delay (s)	11.6	-	-	126.8	15.5	14.2	12.8	-	-
HCM Lane LOS	B	-	-	F	C	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.1	0.4	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	2	6	0	0	0	12	351	28	30	322	15
Future Vol, veh/h	24	2	6	0	0	0	12	351	28	30	322	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	7	18	5	0
Mvmt Flow	28	2	7	0	0	0	14	408	33	35	374	17

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	906	922	383			391	0	0	441	0	0
Stage 1	453	453	-			-	-	-	-	-	-
Stage 2	453	469	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.1	-	-	4.28	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.362	-	-
Pot Cap-1 Maneuver	309	272	669			1179	-	-	1039	-	-
Stage 1	645	573	-			-	-	-	-	-	-
Stage 2	645	564	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	291	0	669			1179	-	-	1039	-	-
Mov Cap-2 Maneuver	291	0	-			-	-	-	-	-	-
Stage 1	635	0	-			-	-	-	-	-	-
Stage 2	617	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.7	0.2	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1179	-	-	291	669	1039	-	-
HCM Lane V/C Ratio	0.012	-	-	0.096	0.014	0.034	-	-
HCM Control Delay (s)	8.1	0	-	18.7	10.5	8.6	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	37	375	0	0	336
Future Vol, veh/h	31	37	375	0	0	336
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	18	6	0	0	7
Mvmt Flow	35	42	426	0	0	382

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	808	426	0	0	426	0
Stage 1	426	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Critical Hdwy	6	6.18	-	-	4.1	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	-	-	2.2	-
Pot Cap-1 Maneuver	386	610	-	-	1144	-
Stage 1	695	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	386	610	-	-	1144	-
Mov Cap-2 Maneuver	386	-	-	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	724	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	482	1144	-
HCM Lane V/C Ratio	-	-	0.16	-	-
HCM Control Delay (s)	-	-	13.9	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	294	24	25	322	39	23
Future Vol, veh/h	294	24	25	322	39	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	8	5	0	4	0	0
Mvmt Flow	330	27	28	362	44	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	357	0	762	344
Stage 1	-	-	-	-	344	-
Stage 2	-	-	-	-	418	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1213	-	317	677
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	609	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1213	-	308	677
Mov Cap-2 Maneuver	-	-	-	-	308	-
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	591	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	16.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	386	-	-	1213	-
HCM Lane V/C Ratio	0.18	-	-	0.023	-
HCM Control Delay (s)	16.4	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-

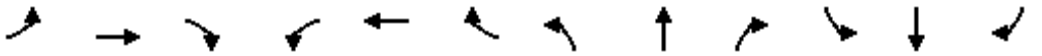
Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	292	25	17	298	49	55
Future Vol, veh/h	292	25	17	298	49	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	7	4	31	5	13	4
Mvmt Flow	332	28	19	339	56	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	360	0	723	346
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	377	-
Critical Hdwy	-	-	4.41	-	5.33	5.64
Critical Hdwy Stg 1	-	-	-	-	4.33	-
Critical Hdwy Stg 2	-	-	-	-	4.33	-
Follow-up Hdwy	-	-	2.479	-	3.617	3.336
Pot Cap-1 Maneuver	-	-	1055	-	480	734
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	760	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1055	-	469	734
Mov Cap-2 Maneuver	-	-	-	-	469	-
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	743	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	580	-	-	1055	-
HCM Lane V/C Ratio	0.204	-	-	0.018	-
HCM Control Delay (s)	12.8	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	508	48	134	532	139	130	220	62	167	208	167
Future Volume (vph)	220	508	48	134	532	139	130	220	62	167	208	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98		0.99		1.00	0.99	
Frt			0.850			0.850		0.967			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	1749	1432	1752	1727	1442	1901	1744	0	1684	1760	0
Flt Permitted	0.116			0.117			0.137			0.291		
Satd. Flow (perm)	203	1749	1432	216	1727	1406	274	1744	0	515	1760	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			170		12			34	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	5%	5%	9%	3%	10%	12%	6%	5%	11%	13%	6%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	268	620	59	163	649	170	159	344	0	204	458	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.5	35.5	49.1	43.1	35.3	43.3	37.9	29.3		38.7	29.7	
Actuated g/C Ratio	0.40	0.33	0.45	0.40	0.32	0.40	0.35	0.27		0.35	0.27	

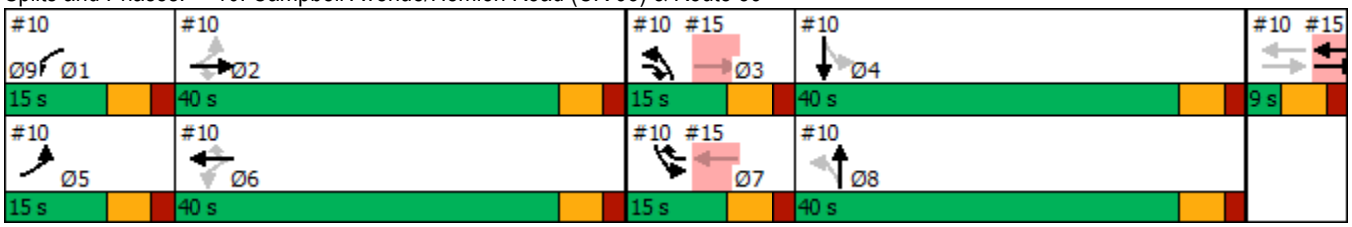
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.33	1.09	0.08	0.78	1.16	0.26	0.71	0.72		0.73	0.91	
Control Delay	204.5	100.7	0.2	48.4	125.7	4.4	40.6	44.8		41.1	59.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	204.5	100.7	0.2	48.4	125.7	4.4	40.6	44.8		41.1	59.4	
LOS	F	F	A	D	F	A	D	D		D	E	
Approach Delay		123.8			91.9			43.5			53.8	
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	~197	~502	0	67	~550	0	66	200		89	277	
Queue Length 95th (ft)	#355	#623	0	#161	#723	31	#115	294		145	#402	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	201	569	725	213	559	663	231	555		279	575	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.33	1.09	0.08	0.77	1.16	0.26	0.69	0.62		0.73	0.80	

Intersection Summary

Area Type: Other
Cycle Length: 119
Actuated Cycle Length: 109.1
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay: 85.6 Intersection LOS: F
Intersection Capacity Utilization 88.6% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

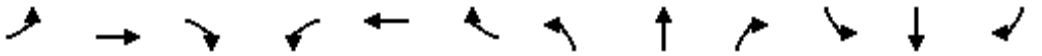
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	498	348	19	87	270	478	48	586	118	477	461	549
Future Volume (vph)	498	348	19	87	270	478	48	586	118	477	461	549
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1758	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1409
Flt Permitted	0.141			0.549			0.100			0.158		
Satd. Flow (perm)	261	1724	1168	1047	1761	1299	164	3343	0	275	1627	1409
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				376
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	508	355	19	89	276	488	49	718	0	487	470	560
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	58.4	50.4	71.6	31.8	28.9	53.4	66.2	40.1		69.1	43.4	73.5
Actuated g/C Ratio	0.39	0.33	0.47	0.21	0.19	0.35	0.44	0.27		0.46	0.29	0.49
v/c Ratio	1.28	0.62	0.03	0.34	0.82	1.07	0.15	0.80		1.22	1.01	0.64
Control Delay	179.9	44.3	0.1	38.0	69.0	89.7	41.0	59.7		162.8	95.9	7.6

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	179.9	44.3	0.1	38.0	69.0	89.7	41.0	59.7		162.8	96.0	7.6
LOS	F	D	A	D	E	F	D	E		F	F	A
Approach Delay		121.5			77.6			58.5			84.8	
Approach LOS		F			E			E			F	
Queue Length 50th (ft)	~546	286	0	51	259	239	24	336		~498	~518	52
Queue Length 95th (ft)	#910	334	0	109	252	#715	57	#481		#816	589	91
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	398	750	604	401	650	458	318	895		400	723	878
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	6	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.28	0.47	0.03	0.22	0.42	1.07	0.15	0.80		1.22	0.66	0.64

Intersection Summary

Area Type: Other

Cycle Length: 190

Actuated Cycle Length: 151.2

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 86.3 Intersection LOS: F

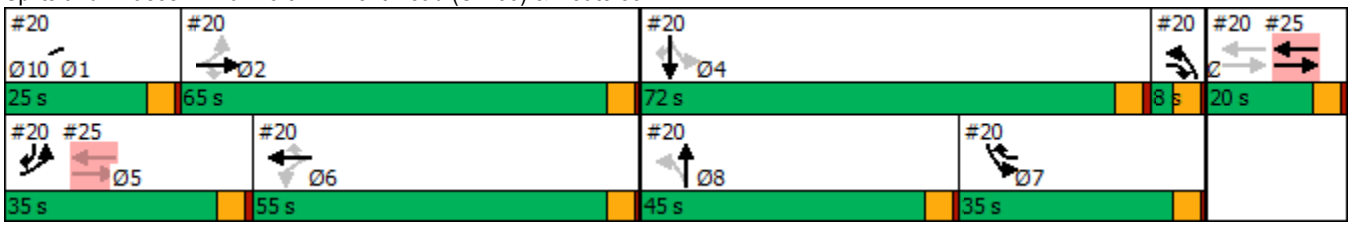
Intersection Capacity Utilization 104.9% ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

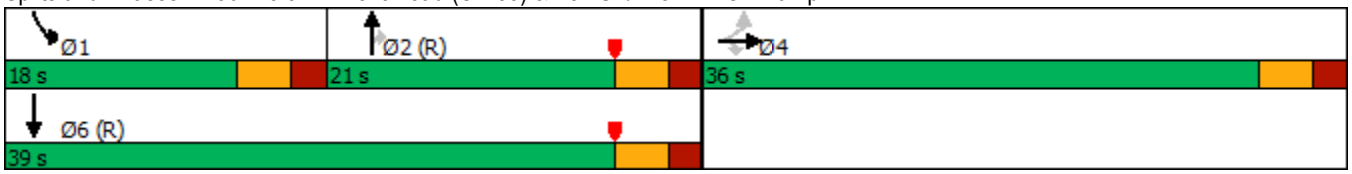
HCM 6th Edition methodology does not support clustered intersections.

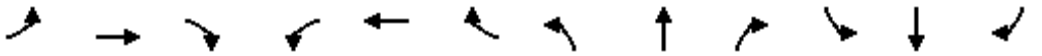
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	6	497	0	0	0	0	883	744	418	987	0
Future Volume (vph)	364	6	497	0	0	0	0	883	744	418	987	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						411			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	5%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	374	502	0	0	0	0	892	752	422	997	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		27.0	27.0					20.8	20.8	12.2	38.0	
Actuated g/C Ratio		0.36	0.36					0.28	0.28	0.16	0.51	
v/c Ratio		0.67	0.91					1.06	1.01	0.74	0.56	
Control Delay		25.7	39.5					72.3	46.8	32.8	10.4	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		25.7	39.5					72.3	46.8	32.8	10.4	
LOS		C	D					E	D	C	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		33.6						60.7			17.1	
Approach LOS		C						E			B	
Queue Length 50th (ft)		133	165					~287	~241	80	123	
Queue Length 95th (ft)		215	#336					#401	#434	m105	m217	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					843	745	609	1766	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.58	0.81					1.06	1.01	0.69	0.56	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 38.9		Intersection LOS: D	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	6	497	0	0	0	0	883	744	418	987	0
Future Volume (veh/h)	364	6	497	0	0	0	0	883	744	418	987	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1844	2067	2007	0
Adj Flow Rate, veh/h	368	6	502				0	892	0	422	997	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	5	2	6	0
Cap, veh/h	598	10	525				0	788		537	1746	0
Arrive On Green	0.41	0.41	0.41				0.00	0.50	0.00	0.05	0.15	0.00
Sat Flow, veh/h	1463	24	1284				0	3226	1563	3818	3913	0
Grp Volume(v), veh/h	374	0	502				0	892	0	422	997	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1563	1909	1906	0
Q Serve(g_s), s	14.9	0.0	28.5				0.0	18.8	0.0	8.2	18.2	0.0
Cycle Q Clear(g_c), s	14.9	0.0	28.5				0.0	18.8	0.0	8.2	18.2	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	608	0	525				0	788		537	1746	0
V/C Ratio(X)	0.62	0.00	0.96				0.00	1.13		0.79	0.57	0.00
Avail Cap(c_a), veh/h	615	0	531				0	788		662	1746	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.43	0.43	0.00
Uniform Delay (d), s/veh	17.5	0.0	21.5				0.0	18.7	0.0	34.6	25.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	28.0				0.0	75.0	0.0	1.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	0.0	17.5				0.0	19.2	0.0	6.3	12.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	0.0	49.5				0.0	93.7	0.0	36.4	25.6	0.0
LnGrp LOS	B	A	D				A	F		D	C	A
Approach Vol, veh/h		876						892			1419	
Approach Delay, s/veh		36.4						93.7			28.8	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.6	23.8		35.6		39.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.2	0.0		30.5		0.0
Green Ext Time (p_c), s	0.4	0.0		0.2		0.0

Intersection Summary		
HCM 6th Ctrl Delay		49.1
HCM 6th LOS		D

Notes

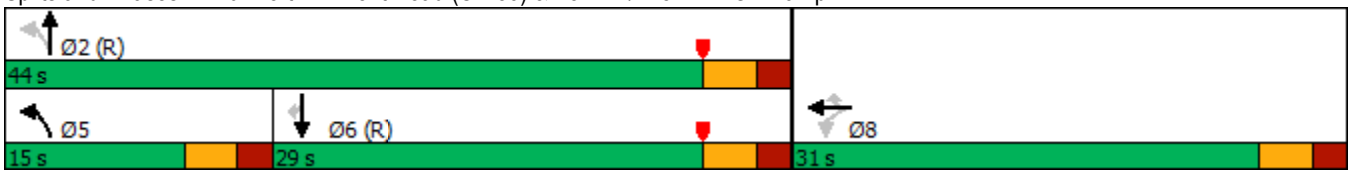
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	660	1	368	344	903	0	0	745	311
Future Volume (vph)	0	0	0	660	1	368	344	903	0	0	745	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1588	1591	1553	1344	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.130					
Satd. Flow (perm)	0	0	0	1588	1591	1553	184	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						370
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	8%	0%	4%	24%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	452	453	504	471	1237	0	0	1021	426
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.3	24.3	24.3	40.7	40.7			25.7	25.7
Actuated g/C Ratio				0.32	0.32	0.32	0.54	0.54			0.34	0.34
v/c Ratio				0.88	0.88	0.88	1.85	0.77			0.82	0.56
Control Delay				43.9	43.9	37.6	413.5	16.7			25.7	6.2
Queue Delay				0.0	0.0	0.0	0.0	0.0			2.9	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				43.9	43.9	37.6	413.5	16.7			28.6	6.8
LOS				D	D	D	F	B			C	A
Approach Delay					41.6			126.2			22.2	
Approach LOS					D			F			C	
Queue Length 50th (ft)				198	198	171	~319	291			234	53
Queue Length 95th (ft)				233	234	204	m#332	m252			152	0
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				550	551	605	254	1616			1241	756
Starvation Cap Reductn				0	0	0	0	0			130	96
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.82	0.82	0.83	1.85	0.77			0.92	0.65

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.85			
Intersection Signal Delay: 67.1		Intersection LOS: E	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

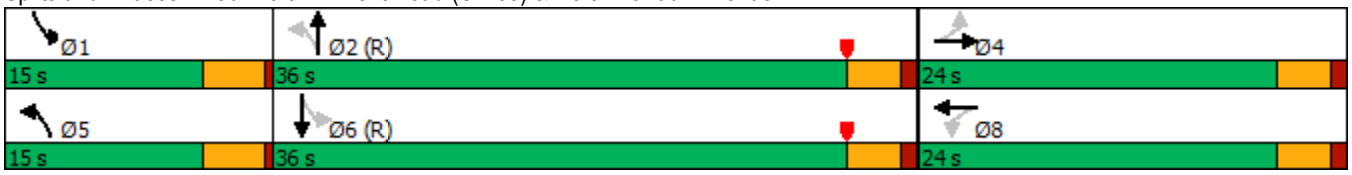
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	0	34	17	0	21	38	1513	11	23	1436	5
Future Volume (vph)	68	0	34	17	0	21	38	1513	11	23	1436	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.926			0.999			0.999	
Flt Protected		0.968			0.978		0.950			0.950		
Satd. Flow (prot)	0	1724	0	0	1671	0	1574	3290	0	1718	3291	0
Flt Permitted		0.774			0.881		0.085			0.085		
Satd. Flow (perm)	0	1379	0	0	1505	0	141	3290	0	154	3291	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		5.0			12.6			4.2			9.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	6%	0%	0%	8%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	114	0	0	42	0	42	1693	0	26	1602	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.7			11.7		56.5	53.3		55.7	50.5	
Actuated g/C Ratio		0.16			0.16		0.75	0.71		0.74	0.67	
v/c Ratio		0.41			0.14		0.14	0.72		0.08	0.72	
Control Delay		16.8			3.9		4.4	14.4		3.8	12.4	

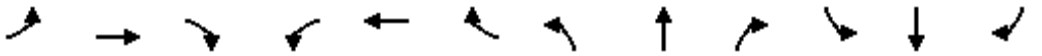
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.8			3.9		4.4	14.4		3.8	12.4	
LOS		B			A		A	B		A	B	
Approach Delay		16.8			3.9			14.1			12.2	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		17			0		4	161		2	207	
Queue Length 95th (ft)		57			12		14	#587		m6	#515	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		421			454		317	2336		344	2214	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.27			0.09		0.13	0.72		0.08	0.72	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 13.2 Intersection LOS: B
Intersection Capacity Utilization 57.8% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	0	34	17	0	21	38	1513	11	23	1436	5
Future Volume (veh/h)	68	0	34	17	0	21	38	1513	11	23	1436	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1811	1900	2057	1937	1682
Adj Flow Rate, veh/h	76	0	38	19	0	23	42	1681	12	26	1596	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	6	0	0	8	25
Cap, veh/h	199	16	68	145	25	121	422	2298	16	313	2385	9
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.66	0.66	0.11	1.00	1.00
Sat Flow, veh/h	930	129	529	584	194	941	1711	3502	25	1959	3761	14
Grp Volume(v), veh/h	114	0	0	42	0	0	42	825	868	26	781	821
Grp Sat Flow(s),veh/h/ln	1587	0	0	1719	0	0	1711	1721	1807	1959	1840	1935
Q Serve(g_s), s	3.3	0.0	0.0	0.0	0.0	0.0	0.5	23.8	23.8	0.3	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	0.0	1.6	0.0	0.0	0.5	23.8	23.8	0.3	0.0	0.0
Prop In Lane	0.67		0.33	0.45		0.55	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	283	0	0	290	0	0	422	1129	1185	313	1167	1227
V/C Ratio(X)	0.40	0.00	0.00	0.14	0.00	0.00	0.10	0.73	0.73	0.08	0.67	0.67
Avail Cap(c_a), veh/h	495	0	0	507	0	0	540	1129	1185	491	1167	1227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.2	0.0	0.0	3.2	8.5	8.5	6.8	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.0	0.8	0.0	0.0	0.4	4.2	4.0	0.4	3.1	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	0.0	0.0	1.3	0.0	0.0	0.3	12.7	13.2	0.2	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	0.0	0.0	30.0	0.0	0.0	3.6	12.7	12.6	7.2	3.1	2.9
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		114			42			1735			1628	
Approach Delay, s/veh		33.8			30.0			12.4			3.1	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	53.2		13.6	9.8	51.6		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	25.8		6.9	2.5	2.0		3.6				
Green Ext Time (p_c), s	0.0	5.9		1.0	0.1	26.2		0.3				

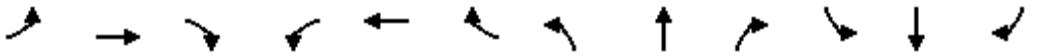
Intersection Summary			
HCM 6th Ctrl Delay		9.0	
HCM 6th LOS		A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	24	383	14	6	13	229	756	82	33	689	119
Future Volume (vph)	110	24	383	14	6	13	229	756	82	33	689	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.985			0.978	
Flt Protected		0.961		0.950			0.950			0.950		
Satd. Flow (prot)	0	1729	1433	1797	913	1242	1645	3229	0	1762	3432	0
Flt Permitted		0.760		0.638			0.190			0.307		
Satd. Flow (perm)	0	1367	1433	1207	913	1242	329	3229	0	569	3432	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78			102		18			30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			10.2			11.1			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	426	16	7	14	254	931	0	37	898	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)		14.0	32.4	14.0	14.0	14.0	50.8	43.9		39.0	32.6	
Actuated g/C Ratio		0.19	0.43	0.19	0.19	0.19	0.68	0.59		0.52	0.43	
v/c Ratio		0.58	0.64	0.07	0.04	0.04	0.56	0.49		0.09	0.59	
Control Delay		36.5	18.0	23.5	23.0	0.2	14.5	7.0		6.5	18.3	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.5	18.0	23.5	23.0	0.2	14.5	7.0		6.5	18.3	
LOS		D	B	C	C	A	B	A		A	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		22.8			14.6			8.6			17.8	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)		64	120	6	3	0	41	75		5	157	
Queue Length 95th (ft)		110	197	20	12	0	123	177		16	234	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		455	662	402	304	482	456	1899		398	1510	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.33	0.64	0.04	0.02	0.03	0.56	0.49		0.09	0.59	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 14.8		Intersection LOS: B	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	24	383	14	6	13	229	756	82	33	689	119
Future Volume (veh/h)	110	24	383	14	6	13	229	756	82	33	689	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	122	27	426	16	7	14	254	840	91	37	766	132
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	382	74	540	317	193	454	375	1374	149	429	1358	234
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.16	0.92	0.92	0.04	0.42	0.42
Sat Flow, veh/h	967	244	1405	1071	635	1492	1717	2988	324	1919	3265	563
Grp Volume(v), veh/h	149	0	426	16	7	14	254	462	469	37	449	449
Grp Sat Flow(s),veh/h/ln	1212	0	1405	1071	635	1492	1717	1642	1670	1919	1914	1913
Q Serve(g_s), s	6.7	0.0	20.1	0.9	0.6	0.5	6.0	3.9	3.9	0.8	13.4	13.4
Cycle Q Clear(g_c), s	7.3	0.0	20.1	8.2	0.6	0.5	6.0	3.9	3.9	0.8	13.4	13.4
Prop In Lane	0.82		1.00	1.00		1.00	1.00		0.19	1.00		0.29
Lane Grp Cap(c), veh/h	456	0	540	317	193	454	375	755	768	429	796	796
V/C Ratio(X)	0.33	0.00	0.79	0.05	0.04	0.03	0.68	0.61	0.61	0.09	0.56	0.56
Avail Cap(c_a), veh/h	491	0	581	348	212	497	375	755	768	514	796	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	20.4	24.0	18.4	18.3	13.9	1.8	1.8	11.5	16.7	16.7
Incr Delay (d2), s/veh	0.4	0.0	6.8	0.1	0.1	0.0	4.5	3.4	3.4	0.1	2.9	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	11.4	0.4	0.2	0.3	4.5	2.4	2.4	0.6	10.1	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	27.2	24.0	18.4	18.4	18.4	5.2	5.1	11.6	19.6	19.6
LnGrp LOS	C	A	C	C	B	B	B	A	A	B	B	B
Approach Vol, veh/h		575			37			1185			935	
Approach Delay, s/veh		25.6			20.8			8.0			19.3	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	39.5		27.8	11.0	36.2		27.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	5.9		22.1	8.0	15.4		10.2				
Green Ext Time (p_c), s	0.0	3.5		0.7	0.0	2.9		0.1				

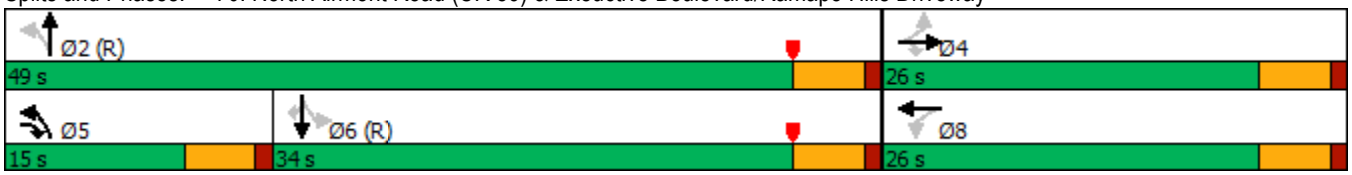
Intersection Summary			
HCM 6th Ctrl Delay		15.7	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	41	3	0	0	210	1040	21	1	1012	73
Future Volume (vph)	27	0	41	3	0	0	210	1040	21	1	1012	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		
Frt			0.850					0.997				0.850
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1589	1370	0	1805	0	1727	3333	0	1806	3492	1577
Flt Permitted							0.189			0.243		
Satd. Flow (perm)	0	1673	1370	0	1900	0	344	3333	0	462	3492	1577
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29					5				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	6%	0%	10%	0%	0%	0%	0%	7%	0%	0%	7%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	45	0	3	0	231	1166	0	1	1112	80
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	26.0	26.0	15.0	26.0	26.0		15.0	49.0		34.0	34.0	34.0
Total Split (%)	34.7%	34.7%	20.0%	34.7%	34.7%		20.0%	65.3%		45.3%	45.3%	45.3%
Maximum Green (s)	21.0	21.0	10.0	21.0	21.0		10.0	44.0		29.0	29.0	29.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		7.7	15.2		7.3		64.2	67.2		49.8	49.8	49.8
Actuated g/C Ratio		0.10	0.20		0.10		0.86	0.90		0.66	0.66	0.66
v/c Ratio		0.18	0.15		0.02		0.49	0.39		0.00	0.48	0.07
Control Delay		32.2	10.2		29.0		8.2	1.7		18.0	12.7	5.6
Queue Delay		0.0	0.0		0.0		0.3	0.0		0.0	0.4	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		32.2	10.2		29.0		8.5	1.7		18.0	13.2	5.6
LOS		C	B		C		A	A		B	B	A
Approach Delay		19.0			29.0			2.8			12.7	
Approach LOS		B			C			A			B	
Queue Length 50th (ft)		13	7		1		11	0		0	93	0
Queue Length 95th (ft)		36	22		9		m48	96		m1	301	m15
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		468	339		532		508	2988		306	2316	1080
Starvation Cap Reductn		0	0		0		45	264		0	0	0
Spillback Cap Reductn		0	5		0		0	0		0	651	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.06	0.13		0.01		0.50	0.43		0.00	0.67	0.07

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 44 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 7.7		Intersection LOS: A	
Intersection Capacity Utilization 56.3%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	0	41	3	0	0	210	1040	21	1	1012	73
Future Volume (veh/h)	27	0	41	3	0	0	210	1040	21	1	1012	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1752	1900	1900	1900	1876	1773	1876	2175	2070	2085
Adj Flow Rate, veh/h	30	0	45	3	0	0	231	1143	23	1	1112	80
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	0	10	0	0	0	0	7	0	0	7	6
Cap, veh/h	174	0	179	180	0	0	497	2746	55	476	2672	1199
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.00	0.13	1.00	1.00	0.68	0.68	0.68
Sat Flow, veh/h	1451	0	1485	1576	0	0	1787	3377	68	560	3933	1766
Grp Volume(v), veh/h	30	0	45	3	0	0	231	570	596	1	1112	80
Grp Sat Flow(s),veh/h/ln	1451	0	1485	1576	0	0	1787	1684	1760	560	1967	1766
Q Serve(g_s), s	1.4	0.0	2.1	0.0	0.0	0.0	2.8	0.0	0.0	0.0	9.5	1.1
Cycle Q Clear(g_c), s	1.5	0.0	2.1	0.1	0.0	0.0	2.8	0.0	0.0	0.0	9.5	1.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	174	0	179	180	0	0	497	1369	1431	476	2672	1199
V/C Ratio(X)	0.17	0.00	0.25	0.02	0.00	0.00	0.46	0.42	0.42	0.00	0.42	0.07
Avail Cap(c_a), veh/h	500	0	515	506	0	0	615	1369	1431	476	2672	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.50	0.50	0.50	0.76	0.76	0.76
Uniform Delay (d), s/veh	34.3	0.0	29.9	33.6	0.0	0.0	3.5	0.0	0.0	3.9	5.4	4.0
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.0	0.0	0.0	0.3	0.5	0.4	0.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	1.4	0.1	0.0	0.0	0.9	0.3	0.3	0.0	5.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	30.6	33.7	0.0	0.0	3.8	0.5	0.4	3.9	5.7	4.1
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		75			3			1397			1193	
Approach Delay, s/veh		32.3			33.7			1.0			5.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		66.0		9.0	10.0	55.9		9.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		44.0		21.0	10.0	29.0		21.0				
Max Q Clear Time (g_c+I1), s		2.0		4.1	4.8	11.5		2.1				
Green Ext Time (p_c), s		4.9		0.2	0.3	5.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.0									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	11	496	17	10	575
Future Vol, veh/h	8	11	496	17	10	575
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	10	0	0	8
Mvmt Flow	13	17	787	27	16	913

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1746	801	0	0	814	0
Stage 1	801	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	208	463	-	-	822	-
Stage 1	636	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	200	463	-	-	822	-
Mov Cap-2 Maneuver	200	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	557	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	298	822	-
HCM Lane V/C Ratio	-	-	0.101	0.019	-
HCM Control Delay (s)	-	-	18.4	9.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	716	21	79	788	17	149
Future Vol, veh/h	716	21	79	788	17	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	6	11	8	17	3
Mvmt Flow	746	22	82	821	18	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	768	0	1742	757
Stage 1	-	-	-	-	757	-
Stage 2	-	-	-	-	985	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	807	-	129	442
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	423	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	807	-	116	442
Mov Cap-2 Maneuver	-	-	-	-	251	-
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	380	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	20
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	410	-	-	807	-
HCM Lane V/C Ratio	0.422	-	-	0.102	-
HCM Control Delay (s)	20	-	-	10	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	2	-	-	0.3	-

Intersection	
Int Delay, s/veh	85.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	146	221	304	74	2	93	1	190	2	2	0
Future Vol, veh/h	0	146	221	304	74	2	93	1	190	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	203	307	422	103	3	129	1	264	3	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	106	0	0	510	0	0	1307	1307	357	1438	1459	105
Stage 1	-	-	-	-	-	-	357	357	-	949	949	-
Stage 2	-	-	-	-	-	-	950	950	-	489	510	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1498	-	-	1025	-	-	174	215	692	131	153	961
Stage 1	-	-	-	-	-	-	693	684	-	351	380	-
Stage 2	-	-	-	-	-	-	370	422	-	596	572	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1498	-	-	1025	-	-	~ 112	121	692	53	86	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 112	121	-	53	86	-
Stage 1	-	-	-	-	-	-	693	684	-	351	214	-
Stage 2	-	-	-	-	-	-	206	238	-	368	572	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.8	$ 300.2	64.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	255	1498	-	-	1025	-	-	66
HCM Lane V/C Ratio	1.547	-	-	-	0.412	-	-	0.084
HCM Control Delay (s)	$ 300.2	0	-	-	10.9	0	-	64.5
HCM Lane LOS	F	A	-	-	B	A	-	F
HCM 95th %tile Q(veh)	23.7	0	-	-	2	-	-	0.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	19	0	0	12	22	1578	2	5	1445	34
Future Vol, veh/h	37	0	19	0	0	12	22	1578	2	5	1445	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	67	0	40	0	0	88	33	7	50	25	7	50
Mvmt Flow	39	0	20	0	0	13	23	1661	2	5	1521	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2426	3258	779	2479	3275	832	1557	0	0	1663	0	0
Stage 1	1549	1549	-	1708	1708	-	-	-	-	-	-	-
Stage 2	877	1709	-	771	1567	-	-	-	-	-	-	-
Critical Hdwy	9.24	6.9	7.9	7.5	6.5	8.66	4.76	-	-	4.6	-	-
Critical Hdwy Stg 1	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.17	4	3.7	3.5	4	4.18	2.53	-	-	2.45	-	-
Pot Cap-1 Maneuver	*86	0	*437	*103	0	*354	*640	-	-	*604	-	-
Stage 1	*54	149	-	*97	148	-	-	-	-	-	-	-
Stage 2	*185	122	-	*363	173	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*80	0	*437	*95	0	*354	*640	-	-	*604	-	-
Mov Cap-2 Maneuver	*80	0	-	*95	0	-	-	-	-	-	-	-
Stage 1	*52	148	-	*94	143	-	-	-	-	-	-	-
Stage 2	*172	118	-	*344	172	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	62	15.5	0.1	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 640	-	-	80	437	354	* 604	-	-
HCM Lane V/C Ratio	0.036	-	-	0.487	0.046	0.036	0.009	-	-
HCM Control Delay (s)	10.8	-	-	86.8	13.6	15.5	11	-	-
HCM Lane LOS	B	-	-	F	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2	0.1	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	2	10	0	0	0	11	253	57	50	497	5
Future Vol, veh/h	10	2	10	0	0	0	11	253	57	50	497	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	10	4	17	35	13	0
Mvmt Flow	15	3	15	0	0	0	17	383	86	76	753	8

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	1369	1412	757			761	0	0	469	0	0
Stage 1	909	909	-			-	-	-	-	-	-
Stage 2	460	503	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.2	-	-	4.45	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.29	-	-	2.515	-	-
Pot Cap-1 Maneuver	163	139	411			816	-	-	940	-	-
Stage 1	396	357	-			-	-	-	-	-	-
Stage 2	640	545	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	136	0	411			816	-	-	940	-	-
Mov Cap-2 Maneuver	136	0	-			-	-	-	-	-	-
Stage 1	385	0	-			-	-	-	-	-	-
Stage 2	550	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.6	0.3	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	816	-	-	136	411	940	-	-
HCM Lane V/C Ratio	0.02	-	-	0.111	0.044	0.081	-	-
HCM Control Delay (s)	9.5	0	-	34.8	14.2	9.2	0	-
HCM Lane LOS	A	A	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	21	263	0	0	527
Future Vol, veh/h	25	21	263	0	0	527
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	70	47	6	0	0	10
Mvmt Flow	33	28	351	0	0	703

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1054	351	0	0	351	0
Stage 1	351	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Critical Hdwy	6.7	6.47	-	-	4.1	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	4.13	3.723	-	-	2.2	-
Pot Cap-1 Maneuver	211	614	-	-	1219	-
Stage 1	607	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	211	614	-	-	1219	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	417	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	301	1219	-
HCM Lane V/C Ratio	-	-	0.204	-	-
HCM Control Delay (s)	-	-	20	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	316	22	9	336	44	48
Future Vol, veh/h	316	22	9	336	44	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	9	15	50	14	5	16
Mvmt Flow	465	32	13	494	65	71

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	497	0	1001	481
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	520	-
Critical Hdwy	-	-	4.6	-	7.25	6.76
Critical Hdwy Stg 1	-	-	-	-	6.25	-
Critical Hdwy Stg 2	-	-	-	-	6.25	-
Follow-up Hdwy	-	-	2.65	-	3.545	3.444
Pot Cap-1 Maneuver	-	-	860	-	213	529
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	526	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	860	-	209	529
Mov Cap-2 Maneuver	-	-	-	-	209	-
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	515	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	25.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	305	-	-	860	-
HCM Lane V/C Ratio	0.444	-	-	0.015	-
HCM Control Delay (s)	25.9	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.2	-	-	0	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	293	71	69	305	40	37
Future Vol, veh/h	293	71	69	305	40	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	18	5	18	16	21
Mvmt Flow	341	83	80	355	47	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	424	0	898	383
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	515	-
Critical Hdwy	-	-	4.15	-	5.36	5.81
Critical Hdwy Stg 1	-	-	-	-	4.36	-
Critical Hdwy Stg 2	-	-	-	-	4.36	-
Follow-up Hdwy	-	-	2.245	-	3.644	3.489
Pot Cap-1 Maneuver	-	-	1119	-	395	666
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1119	-	360	666
Mov Cap-2 Maneuver	-	-	-	-	360	-
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	619	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	462	-	-	1119	-
HCM Lane V/C Ratio	0.194	-	-	0.072	-
HCM Control Delay (s)	14.7	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	20	48	459	565	26
Future Vol, veh/h	7	20	48	459	565	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	4	-	-	2	-2	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	0	55	27	7	7	0
Mvmt Flow	10	29	69	656	807	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1620	826	844	0	-	0
Stage 1	826	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Critical Hdwy	7.2	7.15	4.37	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.795	2.443	-	-	-
Pot Cap-1 Maneuver	80	275	695	-	-	-
Stage 1	361	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	72	275	695	-	-	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	325	-	-	-	-	-
Stage 2	376	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.7	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	695	-	159	-	-
HCM Lane V/C Ratio	0.099	-	0.243	-	-
HCM Control Delay (s)	10.7	-	34.7	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	0.9	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	16	60	500	531	52
Future Vol, veh/h	13	16	60	500	531	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	9	9	0
Mvmt Flow	18	22	81	676	718	70

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1591	753	788	0	-	0
Stage 1	753	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	131	422	840	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	111	422	840	-	-	-
Mov Cap-2 Maneuver	111	-	-	-	-	-
Stage 1	414	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29.3	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	840	-	187	-	-
HCM Lane V/C Ratio	0.097	-	0.21	-	-
HCM Control Delay (s)	9.7	0	29.3	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.3	-	0.8	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	232	603	110	89	697	136	177	183	109	249	212	222
Future Volume (vph)	232	603	110	89	697	136	177	183	109	249	212	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.944			0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1631	1766	1516	1752	1810	1417	1919	1726	0	1762	1744	0
Flt Permitted	0.104			0.151			0.253			0.248		
Satd. Flow (perm)	179	1766	1516	279	1810	1417	511	1726	0	459	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		25			44	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	4%	3%	3%	5%	14%	5%	5%	4%	8%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	622	113	92	719	140	182	301	0	257	448	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.8	39.1	53.4	41.1	34.7	49.3	24.6	15.8		25.1	16.1	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.53	0.26	0.17		0.27	0.17	

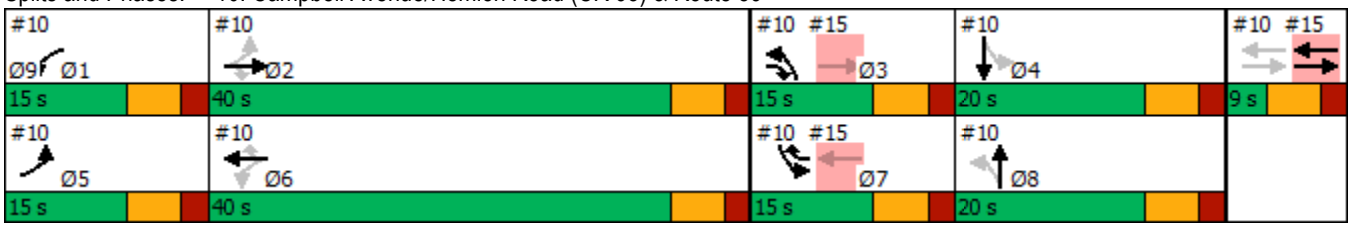
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.05	0.85	0.12	0.40	1.07	0.17	0.69	0.97		1.04	1.34	
Control Delay	100.2	39.1	1.0	18.4	86.7	2.2	39.0	80.6		96.7	200.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	100.2	39.1	1.0	18.4	86.7	2.2	39.0	80.6		96.7	200.9	
LOS	F	D	A	B	F	A	D	F		F	F	
Approach Delay		49.7			67.6			64.9			162.9	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	~96	320	0	24	~451	0	77	~174		~121	~332	
Queue Length 95th (ft)	#329	#635	10	68	#828	24	#152	#306		#279	#524	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	227	736	938	270	669	822	271	311		248	335	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.05	0.85	0.12	0.34	1.07	0.17	0.67	0.97		1.04	1.34	

Intersection Summary

Area Type: Other
Cycle Length: 99
Actuated Cycle Length: 93.8
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 83.2 Intersection LOS: F
Intersection Capacity Utilization 104.1% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

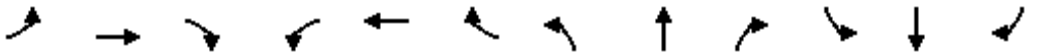
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	541	438	73	139	379	533	61	474	160	432	614	634
Future Volume (vph)	541	438	73	139	379	533	61	474	160	432	614	634
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1724	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1436
Flt Permitted	0.102			0.319			0.100			0.184		
Satd. Flow (perm)	185	1808	1424	614	1828	1398	171	3279	0	329	1739	1436
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					22				240
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	558	452	75	143	391	549	63	654	0	445	633	654
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	69.3	58.1	56.4	45.8	39.7	64.2	44.0	40.2		75.4	66.5	96.7
Actuated g/C Ratio	0.43	0.36	0.35	0.28	0.24	0.40	0.27	0.25		0.47	0.41	0.60

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

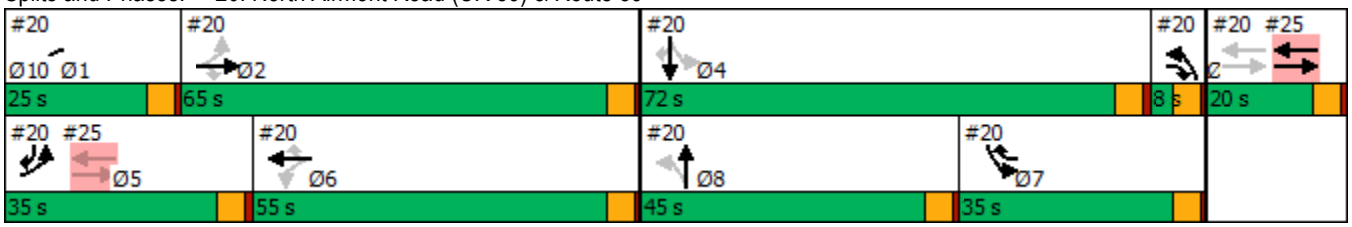
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.53	0.70	0.13	0.55	0.87	0.99	0.79	0.79		1.09	0.89	0.69
Control Delay	287.1	48.0	2.2	40.6	72.9	64.0	101.9	63.8		123.3	60.9	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	8.4	0.0
Total Delay	287.1	48.0	2.2	40.6	72.9	64.0	101.9	63.8		123.3	69.2	12.3
LOS	F	D	A	D	E	E	F	E		F	E	B
Approach Delay		167.8			64.2			67.2			61.6	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	~745	397	0	85	394	277	36	325		~410	598	209
Queue Length 95th (ft)	#1147	431	14	161	360	#629	#129	#472		#768	#999	306
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	365	734	559	355	629	554	80	829		408	721	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	68	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.53	0.62	0.13	0.40	0.62	0.99	0.79	0.79		1.09	0.97	0.69

Intersection Summary			
Area Type:	Other		
Cycle Length: 190			
Actuated Cycle Length: 162.1			
Natural Cycle: 150			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.53			
Intersection Signal Delay: 88.0		Intersection LOS: F	
Intersection Capacity Utilization 116.4%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

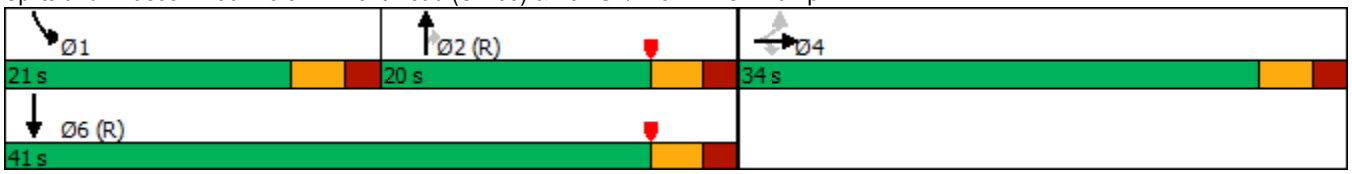
HCM 6th Edition methodology does not support clustered intersections.

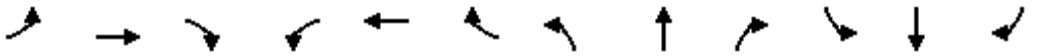
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	289	3	347	0	0	0	0	838	792	487	1346	0
Future Volume (vph)	289	3	347	0	0	0	0	838	792	487	1346	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1445	0	0	0	0	3154	1616	3485	3524	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1445	0	0	0	0	3154	1594	3482	3524	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						453			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	9%	0%	0%	0%	0%	9%	5%	3%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	295	351	0	0	0	0	846	800	492	1360	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		19.4	19.4					26.3	26.3	14.2	45.6	
Actuated g/C Ratio		0.26	0.26					0.35	0.35	0.19	0.61	
v/c Ratio		0.74	0.78					0.76	0.94	0.74	0.64	
Control Delay		35.7	29.7					24.6	25.3	28.7	5.0	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		35.7	29.7					24.6	25.3	28.7	5.1	
LOS		D	C					C	C	C	A	
Approach Delay		32.4						25.0			11.4	
Approach LOS		C						C			B	
Queue Length 50th (ft)		126	109					103	43	81	0	
Queue Length 95th (ft)		176	172					m#363	m#436	m137	m241	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	621					1107	853	743	2140	
Starvation Cap Reductn		0	0					0	0	0	141	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.49	0.57					0.76	0.94	0.66	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 20.1		Intersection LOS: C	
Intersection Capacity Utilization 128.7%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	3	347	0	0	0	0	838	792	487	1346	0
Future Volume (veh/h)	289	3	347	0	0	0	0	838	792	487	1346	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1619				0	1714	1844	2052	2022	0
Adj Flow Rate, veh/h	292	3	351				0	846	0	492	1360	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	9				0	9	5	3	5	0
Cap, veh/h	474	5	394				0	1144		613	2227	0
Arrive On Green	0.29	0.29	0.29				0.00	0.70	0.00	0.11	0.39	0.00
Sat Flow, veh/h	1653	17	1372				0	3342	1563	3791	3942	0
Grp Volume(v), veh/h	295	0	351				0	846	0	492	1360	0
Grp Sat Flow(s),veh/h/ln	1670	0	1372				0	1628	1563	1895	1921	0
Q Serve(g_s), s	11.5	0.0	18.4				0.0	12.1	0.0	9.5	21.3	0.0
Cycle Q Clear(g_c), s	11.5	0.0	18.4				0.0	12.1	0.0	9.5	21.3	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	479	0	394				0	1144		613	2227	0
V/C Ratio(X)	0.62	0.00	0.89				0.00	0.74		0.80	0.61	0.00
Avail Cap(c_a), veh/h	646	0	531				0	1144		809	2227	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.20	0.20	0.00
Uniform Delay (d), s/veh	23.2	0.0	25.6				0.0	9.0	0.0	32.3	16.1	0.0
Incr Delay (d2), s/veh	0.5	0.0	11.5				0.0	4.3	0.0	0.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	11.2				0.0	5.4	0.0	6.0	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	0.0	37.1				0.0	13.3	0.0	32.9	16.4	0.0
LnGrp LOS	C	A	D				A	B		C	B	A
Approach Vol, veh/h		646						846			1852	
Approach Delay, s/veh		31.0						13.3			20.8	
Approach LOS		C						B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.1	31.4		26.5		48.5
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	11.5	0.0		20.4		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Notes

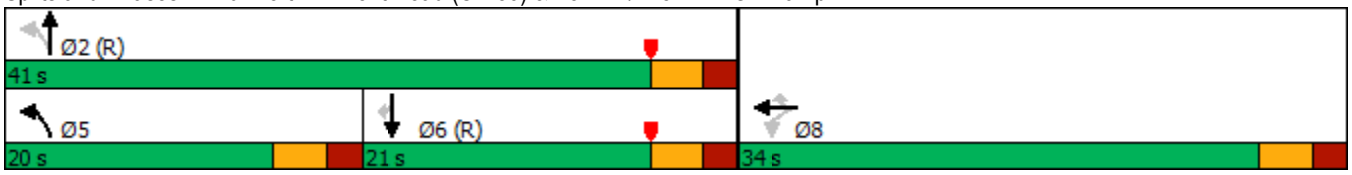
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	852	2	490	412	715	0	0	981	483
Future Volume (vph)	0	0	0	852	2	490	412	715	0	0	981	483
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1649	1654	1583	1462	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.157					
Satd. Flow (perm)	0	0	0	1649	1654	1583	241	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						147						377
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	4%	3%	2%	14%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	434	437	500	420	730	0	0	1001	493
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.5	24.5	24.5	40.5	40.5			20.5	20.5
Actuated g/C Ratio				0.33	0.33	0.33	0.54	0.54			0.27	0.27
v/c Ratio				0.81	0.81	0.81	1.12	0.44			1.02	0.72
Control Delay				34.8	35.0	26.8	94.8	4.4			65.2	23.3
Queue Delay				0.0	0.0	0.4	0.0	0.0			30.0	0.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.8	35.0	27.2	94.8	4.4			95.2	24.0
LOS				C	D	C	F	A			F	C
Approach Delay					32.1			37.4			71.7	
Approach LOS					C			D			E	
Queue Length 50th (ft)				186	187	146	~189	36			~295	132
Queue Length 95th (ft)				278	282	249	m#307	19			#461	#274
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				637	639	702	374	1654			982	685
Starvation Cap Reductn				0	0	0	0	0			83	45
Spillback Cap Reductn				0	0	30	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.68	0.68	0.74	1.12	0.44			1.11	0.77

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 48.4		Intersection LOS: D	
Intersection Capacity Utilization 128.7%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

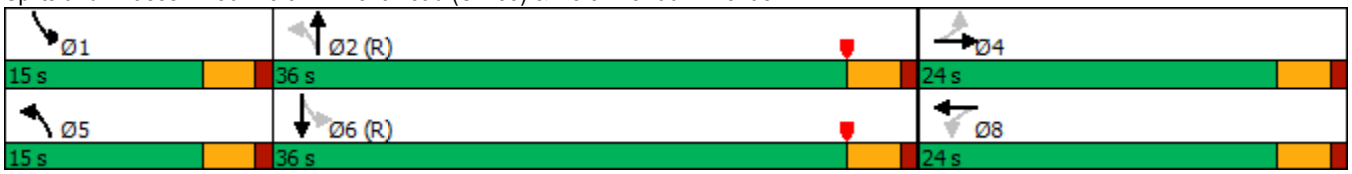
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	2	32	60	2	63	41	1437	70	68	1588	12
Future Volume (vph)	68	2	32	60	2	63	41	1437	70	68	1588	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.993			0.999	
Flt Protected		0.968			0.976		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1844	0	1589	3278	0	1718	3388	0
Flt Permitted		0.701			0.818		0.091			0.087		
Satd. Flow (perm)	0	1292	0	0	1545	0	152	3278	0	157	3388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			66			8			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		4.1			10.5			4.2			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	6%	0%	0%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	135	0	45	1638	0	74	1739	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		12.9			12.9		53.6	46.4		54.7	49.3	
Actuated g/C Ratio		0.17			0.17		0.71	0.62		0.73	0.66	
v/c Ratio		0.45			0.42		0.15	0.81		0.23	0.78	
Control Delay		26.2			18.8		5.0	20.5		9.2	15.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.2			18.8		5.0	20.5		9.2	15.6	
LOS		C			B		A	C		A	B	
Approach Delay		26.2			18.8			20.1			15.4	
Approach LOS		C			B			C			B	
Queue Length 50th (ft)		34			28		5	337		8	190	
Queue Length 95th (ft)		75			71		15	#584		m29	#603	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		366			460		320	2030		344	2227	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.30			0.29		0.14	0.81		0.22	0.78	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 17.9 Intersection LOS: B
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

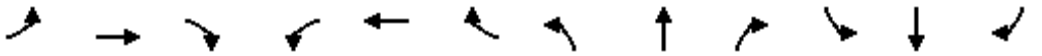
Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	2	32	60	2	63	41	1437	70	68	1588	12
Future Volume (veh/h)	68	2	32	60	2	63	41	1437	70	68	1588	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1811	1900	2057	1982	2057
Adj Flow Rate, veh/h	74	2	35	65	2	68	45	1562	76	74	1726	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	6	0	0	5	0
Cap, veh/h	211	21	70	162	21	113	354	2013	98	386	2400	18
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.14	0.83	0.83
Sat Flow, veh/h	991	155	528	685	158	855	1725	3341	162	1959	3831	29
Grp Volume(v), veh/h	111	0	0	135	0	0	45	802	836	74	848	891
Grp Sat Flow(s),veh/h/ln	1674	0	0	1697	0	0	1725	1721	1782	1959	1883	1977
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.6	26.0	26.4	0.8	14.0	14.1
Cycle Q Clear(g_c), s	4.2	0.0	0.0	5.2	0.0	0.0	0.6	26.0	26.4	0.8	14.0	14.1
Prop In Lane	0.67		0.32	0.48		0.50	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	302	0	0	296	0	0	354	1037	1074	386	1179	1238
V/C Ratio(X)	0.37	0.00	0.00	0.46	0.00	0.00	0.13	0.77	0.78	0.19	0.72	0.72
Avail Cap(c_a), veh/h	502	0	0	505	0	0	467	1037	1074	468	1179	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	30.4	0.0	0.0	5.1	11.1	11.2	8.9	3.5	3.5
Incr Delay (d2), s/veh	2.7	0.0	0.0	3.9	0.0	0.0	0.6	5.6	5.6	0.9	3.8	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	0.0	4.6	0.0	0.0	0.4	14.9	15.4	0.9	6.4	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	0.0	34.4	0.0	0.0	5.6	16.7	16.7	9.7	7.3	7.1
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		111			135			1683			1813	
Approach Delay, s/veh		32.7			34.4			16.4			7.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	49.2		13.9	10.1	51.0		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	28.4		6.2	2.6	16.1		7.2				
Green Ext Time (p_c), s	0.2	3.5		0.9	0.1	15.0		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		13.1	
HCM 6th LOS		B	

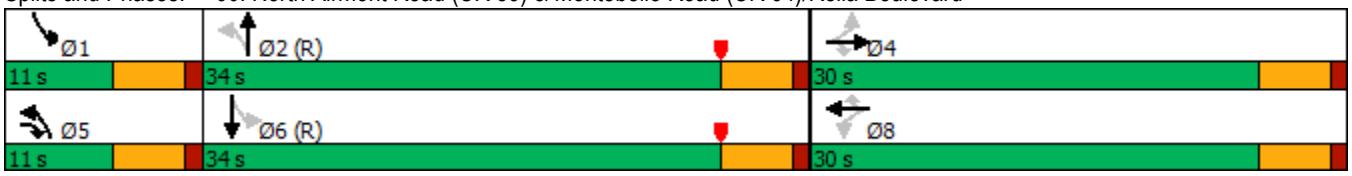


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	9	282	94	35	74	314	826	49	36	982	132
Future Volume (vph)	158	9	282	94	35	74	314	826	49	36	982	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.992			0.982	
Flt Protected		0.955		0.950			0.950			0.950		
Satd. Flow (prot)	0	1665	1433	1762	1723	1553	1710	3355	0	1745	3541	0
Flt Permitted		0.710		0.594			0.121			0.310		
Satd. Flow (perm)	0	1238	1433	1102	1723	1553	218	3355	0	570	3541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			102		9			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	175	297	99	37	78	331	921	0	38	1173	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		16.2	36.9	16.2	16.2	16.2	47.9	41.7		34.5	28.1	
Actuated g/C Ratio		0.22	0.49	0.22	0.22	0.22	0.64	0.56		0.46	0.37	
v/c Ratio		0.66	0.41	0.42	0.10	0.19	0.73	0.49		0.10	0.88	
Control Delay		37.8	13.3	29.2	21.7	4.1	32.4	13.2		7.5	30.2	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		37.8	13.3	29.2	21.7	4.1	32.4	13.2		7.5	30.2	
LOS		D	B	C	C	A	C	B		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		22.4			18.8			18.3			29.5	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)		75	76	40	14	0	88	143		5	251	
Queue Length 95th (ft)		123	136	74	32	20	#311	204		19	#345	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		412	720	367	574	585	452	1870		363	1383	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.42	0.41	0.27	0.06	0.13	0.73	0.49		0.10	0.85	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 23.2		Intersection LOS: C	
Intersection Capacity Utilization 77.1%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	9	282	94	35	74	314	826	49	36	982	132
Future Volume (veh/h)	158	9	282	94	35	74	314	826	49	36	982	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	166	9	297	99	37	78	331	869	52	38	1034	139
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	348	14	433	516	467	414	368	1742	104	435	1693	227
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.11	0.71	0.71	0.04	0.49	0.49
Sat Flow, veh/h	1116	61	1405	1583	2046	1810	1773	3256	195	1904	3444	463
Grp Volume(v), veh/h	175	0	297	99	37	78	331	453	468	38	583	590
Grp Sat Flow(s),veh/h/ln	1177	0	1405	1583	2046	1810	1773	1698	1752	1904	1944	1963
Q Serve(g_s), s	9.6	0.0	13.9	0.0	1.1	2.6	6.0	8.9	8.9	0.7	16.3	16.4
Cycle Q Clear(g_c), s	10.6	0.0	13.9	3.0	1.1	2.6	6.0	8.9	8.9	0.7	16.3	16.4
Prop In Lane	0.95		1.00	1.00		1.00	1.00		0.11	1.00		0.24
Lane Grp Cap(c), veh/h	362	0	433	516	467	414	368	909	938	435	955	965
V/C Ratio(X)	0.48	0.00	0.69	0.19	0.08	0.19	0.90	0.50	0.50	0.09	0.61	0.61
Avail Cap(c_a), veh/h	494	0	581	682	682	603	368	909	938	518	955	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	22.7	23.5	22.7	23.3	16.4	6.3	6.3	8.8	13.8	13.9
Incr Delay (d2), s/veh	1.0	0.0	2.1	0.2	0.1	0.2	22.3	1.8	1.7	0.1	2.9	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	0.0	8.2	2.6	0.9	2.0	8.9	4.9	5.0	0.5	11.6	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	24.8	23.7	22.8	23.5	38.7	8.1	8.0	8.8	16.8	16.7
LnGrp LOS	C	A	C	C	C	C	D	A	A	A	B	B
Approach Vol, veh/h		472			214			1252			1211	
Approach Delay, s/veh		26.0			23.5			16.1			16.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	45.1		22.1	11.0	41.9		22.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.7	10.9		15.9	8.0	18.4		5.0				
Green Ext Time (p_c), s	0.0	3.2		1.2	0.0	3.6		0.6				

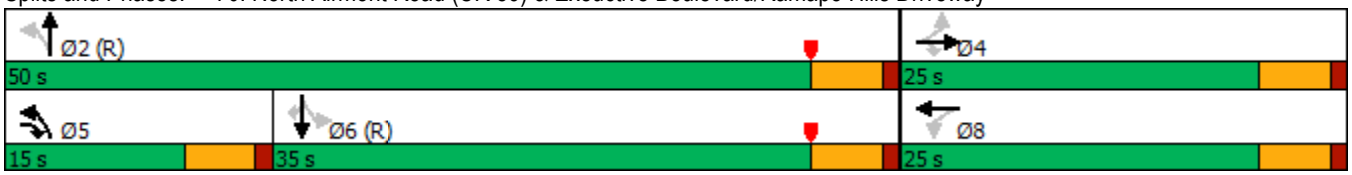
Intersection Summary			
HCM 6th Ctrl Delay		18.3	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	0	138	16	0	4	80	1106	19	5	1310	43
Future Volume (vph)	79	0	138	16	0	4	80	1106	19	5	1310	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor							1.00	1.00		1.00		0.98
Frt			0.850		0.974			0.997				0.850
Flt Protected		0.950			0.961		0.950			0.950		
Satd. Flow (prot)	0	1604	1507	0	1778	0	1661	3427	0	1806	3593	1623
Flt Permitted		0.744			0.741		0.114			0.241		
Satd. Flow (perm)	0	1257	1507	0	1371	0	199	3427	0	458	3593	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29		102			4				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%	4%	4%	0%	0%	4%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	82	144	0	21	0	83	1172	0	5	1365	45
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	50.0		35.0	35.0	35.0
Total Split (%)	33.3%	33.3%	20.0%	33.3%	33.3%		20.0%	66.7%		46.7%	46.7%	46.7%
Maximum Green (s)	20.0	20.0	10.0	20.0	20.0		10.0	45.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		10.5	20.3		10.5		56.7	57.7		44.7	44.7	44.7
Actuated g/C Ratio		0.14	0.27		0.14		0.76	0.77		0.60	0.60	0.60
v/c Ratio		0.47	0.34		0.08		0.29	0.44		0.02	0.64	0.05
Control Delay		37.3	17.1		0.6		8.9	6.4		4.0	6.5	0.3
Queue Delay		0.0	2.0		0.2		0.0	0.5		0.0	1.5	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.3	19.1		0.8		8.9	6.9		4.0	8.0	0.3
LOS		D	B		A		A	A		A	A	A
Approach Delay		25.7			0.8			7.1			7.7	
Approach LOS		C			A			A			A	
Queue Length 50th (ft)		36	40		0		9	84		0	30	0
Queue Length 95th (ft)		72	74		0		m36	191		m1	371	m0
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		335	488		440		345	2636		272	2139	987
Starvation Cap Reductn		0	0		0		0	903		0	0	0
Spillback Cap Reductn		0	225		221		0	0		0	545	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.24	0.55		0.10		0.24	0.68		0.02	0.86	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 8 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 8.8		Intersection LOS: A	
Intersection Capacity Utilization 61.4%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	0	138	16	0	4	80	1106	19	5	1310	43
Future Volume (veh/h)	79	0	138	16	0	4	80	1106	19	5	1310	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1900	1900	1900	1900	1817	1817	1876	2175	2115	2130
Adj Flow Rate, veh/h	82	0	144	17	0	4	83	1152	20	5	1365	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	0	0	0	4	4	0	0	4	3
Cap, veh/h	279	0	274	165	9	21	354	2609	45	447	2532	1136
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.07	1.00	1.00	0.63	0.63	0.63
Sat Flow, veh/h	1591	0	1610	678	81	179	1731	3472	60	557	4019	1804
Grp Volume(v), veh/h	82	0	144	21	0	0	83	573	599	5	1365	45
Grp Sat Flow(s),veh/h/ln	1591	0	1610	937	0	0	1731	1726	1806	557	2010	1804
Q Serve(g_s), s	0.0	0.0	6.1	0.5	0.0	0.0	1.1	0.0	0.0	0.3	14.3	0.7
Cycle Q Clear(g_c), s	3.1	0.0	6.1	3.6	0.0	0.0	1.1	0.0	0.0	0.3	14.3	0.7
Prop In Lane	1.00		1.00	0.81		0.19	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	279	0	274	195	0	0	354	1297	1357	447	2532	1136
V/C Ratio(X)	0.29	0.00	0.53	0.11	0.00	0.00	0.23	0.44	0.44	0.01	0.54	0.04
Avail Cap(c_a), veh/h	497	0	518	394	0	0	490	1297	1357	447	2532	1136
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.78	0.78	0.78	0.56	0.56	0.56
Uniform Delay (d), s/veh	30.8	0.0	28.4	30.7	0.0	0.0	5.4	0.0	0.0	5.2	7.8	5.3
Incr Delay (d2), s/veh	0.6	0.0	1.6	0.2	0.0	0.0	0.3	0.9	0.8	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	4.4	0.7	0.0	0.0	0.5	0.6	0.6	0.0	7.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.3	0.0	29.9	30.9	0.0	0.0	5.7	0.9	0.8	5.2	8.2	5.3
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		226			21			1255			1415	
Approach Delay, s/veh		30.4			30.9			1.2			8.1	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		61.4		13.6	9.1	52.2		13.6				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		45.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s		2.0		8.1	3.1	16.3		5.6				
Green Ext Time (p_c), s		4.9		0.6	0.1	5.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			7.0									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	19	572	9	5	591
Future Vol, veh/h	30	19	572	9	5	591
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	8	0	0	8
Mvmt Flow	36	23	689	11	6	712

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1419	695	0	0	700	0
Stage 1	695	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	286	520	-	-	906	-
Stage 1	679	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	283	520	-	-	906	-
Mov Cap-2 Maneuver	283	-	-	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	660	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	344	906	-
HCM Lane V/C Ratio	-	-	0.172	0.007	-
HCM Control Delay (s)	-	-	17.6	9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	934	27	178	896	26	118
Future Vol, veh/h	934	27	178	896	26	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	7	6	6	0	7
Mvmt Flow	994	29	189	953	28	126

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1023	0	2340	1009
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1331	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	663	-	68	319
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	335	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	663	-	49	319
Mov Cap-2 Maneuver	-	-	-	-	162	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	240	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	34.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	271	-	-	663	-
HCM Lane V/C Ratio	0.565	-	-	0.286	-
HCM Control Delay (s)	34.3	-	-	12.6	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	3.2	-	-	1.2	-

Intersection	
Int Delay, s/veh	54.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	81	139	216	157	6	186	9	293	3	4	3
Future Vol, veh/h	0	81	139	216	157	6	186	9	293	3	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	91	156	243	176	7	209	10	329	3	4	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	183	0	0	247	0	0	838	838	169	1005	913	180
Stage 1	-	-	-	-	-	-	169	169	-	666	666	-
Stage 2	-	-	-	-	-	-	669	669	-	339	247	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1404	-	-	1290	-	-	342	367	881	248	277	877
Stage 1	-	-	-	-	-	-	860	792	-	487	456	-
Stage 2	-	-	-	-	-	-	515	533	-	706	680	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1404	-	-	1290	-	-	281	290	881	127	219	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	281	290	-	127	219	-
Stage 1	-	-	-	-	-	-	860	792	-	487	360	-
Stage 2	-	-	-	-	-	-	400	421	-	437	680	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.8	118.1	22.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	476	1404	-	-	1290	-	-	221
HCM Lane V/C Ratio	1.152	-	-	-	0.188	-	-	0.051
HCM Control Delay (s)	118.1	0	-	-	8.4	0	-	22.2
HCM Lane LOS	F	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	19.6	0	-	-	0.7	-	-	0.2

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	0	46	0	0	16	17	1549	2	3	1622	68
Future Vol, veh/h	65	0	46	0	0	16	17	1549	2	3	1622	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	22	0	12	0	0	31	17	7	50	100	5	34
Mvmt Flow	71	0	51	0	0	18	19	1702	2	3	1782	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2715	3568	929	2638	3604	852	1857	0	0	1704	0	0
Stage 1	1826	1826	-	1741	1741	-	-	-	-	-	-	-
Stage 2	889	1742	-	897	1863	-	-	-	-	-	-	-
Critical Hdwy	8.34	6.9	7.34	7.5	6.5	7.52	4.44	-	-	6.1	-	-
Critical Hdwy Stg 1	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.72	4	3.42	3.5	4	3.61	2.37	-	-	3.2	-	-
Pot Cap-1 Maneuver	74	0	*392	*103	0	*410	*566	-	-	*463	-	-
Stage 1	~ 52	105	-	*92	142	-	-	-	-	-	-	-
Stage 2	241	117	-	*305	124	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	~ 68	0	*392	*87	0	*410	*566	-	-	*463	-	-
Mov Cap-2 Maneuver	~ 68	0	-	*87	0	-	-	-	-	-	-	-
Stage 1	~ 50	104	-	*89	137	-	-	-	-	-	-	-
Stage 2	223	113	-	*264	123	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	139.9	14.2	0.1	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 566	-	-	68	392	410	* 463	-	-
HCM Lane V/C Ratio	0.033	-	-	1.05	0.129	0.043	0.007	-	-
HCM Control Delay (s)	11.6	-	-	227.9	15.5	14.2	12.8	-	-
HCM Lane LOS	B	-	-	F	C	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	5.4	0.4	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	2	6	0	0	0	12	427	28	30	345	15
Future Vol, veh/h	24	2	6	0	0	0	12	427	28	30	345	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	7	18	5	0
Mvmt Flow	28	2	7	0	0	0	14	497	33	35	401	17

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	1022	1038	410			418	0	0	530	0	0
Stage 1	480	480	-			-	-	-	-	-	-
Stage 2	542	558	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.1	-	-	4.28	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.362	-	-
Pot Cap-1 Maneuver	264	233	646			1152	-	-	961	-	-
Stage 1	627	558	-			-	-	-	-	-	-
Stage 2	587	515	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	247	0	646			1152	-	-	961	-	-
Mov Cap-2 Maneuver	247	0	-			-	-	-	-	-	-
Stage 1	616	0	-			-	-	-	-	-	-
Stage 2	559	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0.2	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1152	-	-	247	646	961	-	-
HCM Lane V/C Ratio	0.012	-	-	0.113	0.014	0.036	-	-
HCM Control Delay (s)	8.2	0	-	21.4	10.7	8.9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	37	451	0	0	359
Future Vol, veh/h	31	37	451	0	0	359
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	18	6	0	0	7
Mvmt Flow	35	42	513	0	0	408

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	921	513	0	0	513	0
Stage 1	513	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Critical Hdwy	6	6.18	-	-	4.1	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	-	-	2.2	-
Pot Cap-1 Maneuver	335	546	-	-	1063	-
Stage 1	641	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	335	546	-	-	1063	-
Mov Cap-2 Maneuver	335	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	707	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1063	-
HCM Lane V/C Ratio	-	-	0.182	-	-
HCM Control Delay (s)	-	-	15.4	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	353	24	25	340	39	23
Future Vol, veh/h	353	24	25	340	39	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	8	5	0	4	0	0
Mvmt Flow	397	27	28	382	44	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	424	0	849	411
Stage 1	-	-	-	-	411	-
Stage 2	-	-	-	-	438	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1146	-	277	616
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	594	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1146	-	268	616
Mov Cap-2 Maneuver	-	-	-	-	268	-
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	576	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	18.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	339	-	-	1146	-
HCM Lane V/C Ratio	0.205	-	-	0.025	-
HCM Control Delay (s)	18.3	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	351	25	17	316	49	55
Future Vol, veh/h	351	25	17	316	49	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	7	4	31	5	13	4
Mvmt Flow	399	28	19	359	56	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	427	0	810	413
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	397	-
Critical Hdwy	-	-	4.41	-	5.33	5.64
Critical Hdwy Stg 1	-	-	-	-	4.33	-
Critical Hdwy Stg 2	-	-	-	-	4.33	-
Follow-up Hdwy	-	-	2.479	-	3.617	3.336
Pot Cap-1 Maneuver	-	-	993	-	438	680
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	749	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	993	-	427	680
Mov Cap-2 Maneuver	-	-	-	-	427	-
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	532	-	-	993	-
HCM Lane V/C Ratio	0.222	-	-	0.019	-
HCM Control Delay (s)	13.7	-	-	8.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	51	30	561	545	8
Future Vol, veh/h	25	51	30	561	545	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	4	-	-	2	-2	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	33	67	5	6	0
Mvmt Flow	30	61	36	668	649	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1394	654	659	0	-	0
Stage 1	654	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Critical Hdwy	7.2	6.93	4.77	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.597	2.803	-	-	-
Pot Cap-1 Maneuver	116	387	686	-	-	-
Stage 1	451	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	110	387	686	-	-	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	428	-	-	-	-	-
Stage 2	403	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.1	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	686	-	212	-	-
HCM Lane V/C Ratio	0.052	-	0.427	-	-
HCM Control Delay (s)	10.5	-	34.1	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.2	-	2	-	-

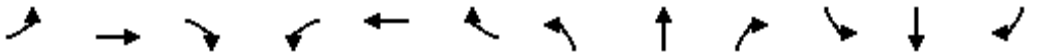
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	59	18	530	606	15
Future Vol, veh/h	51	59	18	530	606	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	8	8	0
Mvmt Flow	59	68	21	609	697	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1357	706	714	0	-	0
Stage 1	706	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	179	448	895	-	-	-
Stage 1	513	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	173	448	895	-	-	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	542	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	31.7	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	895	-	258	-	-
HCM Lane V/C Ratio	0.023	-	0.49	-	-
HCM Control Delay (s)	9.1	0	31.7	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	2.5	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	508	48	134	532	139	130	220	62	167	208	167
Future Volume (vph)	220	508	48	134	532	139	130	220	62	167	208	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		0	1		1	1		0	2		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor						0.97		1.00		1.00	0.99	
Frt		0.987				0.850		0.967			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	3269	0	1752	1727	1442	1901	1748	0	3266	1759	0
Flt Permitted	0.077			0.324			0.111			0.950		
Satd. Flow (perm)	135	3269	0	598	1727	1405	222	1748	0	3254	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				170		9			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	5%	5%	9%	3%	10%	12%	6%	5%	11%	13%	6%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	268	679	0	163	649	170	159	344	0	204	458	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases	2	9		6	9	6	8					
Detector Phase	5	2		1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0		9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	24.0	59.0		17.0	52.0	24.0	19.0	41.0		24.0	46.0	
Total Split (%)	16.0%	39.3%		11.3%	34.7%	16.0%	12.7%	27.3%		16.0%	30.7%	
Maximum Green (s)	18.0	53.0		11.0	46.0	18.0	13.0	35.0		18.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	70.3	55.2		56.3	47.3	59.6	47.4	35.9		13.4	37.7	
Actuated g/C Ratio	0.50	0.39		0.40	0.34	0.42	0.34	0.25		0.10	0.27	

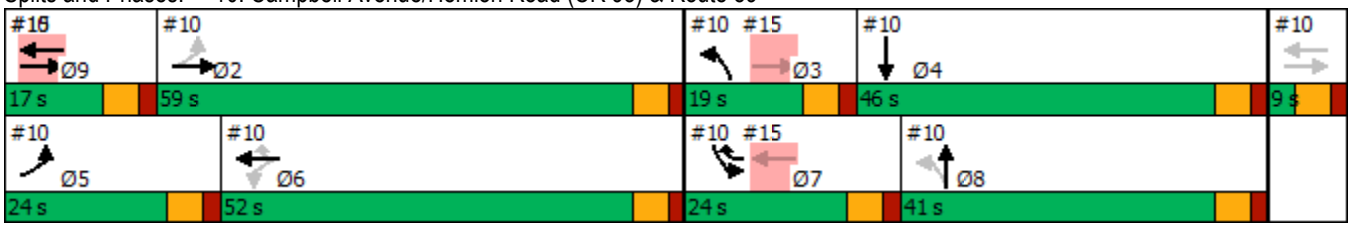
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	6%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.02	0.53		0.51	1.12	0.24	0.75	0.76		0.66	0.94	
Control Delay	101.7	34.5		28.5	117.6	4.0	54.9	60.2		72.8	75.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	101.7	34.5		28.5	117.6	4.0	54.9	60.2		72.8	75.3	
LOS	F	C		C	F	A	D	E		E	E	
Approach Delay		53.5			83.2			58.5			74.5	
Approach LOS		D			F			E			E	
Queue Length 50th (ft)	~210	252		81	~695	0	92	275		94	382	
Queue Length 95th (ft)	#369	262		128	#791	30	158	388		128	#535	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75			180		560	150			145		
Base Capacity (vph)	262	1285		332	579	737	232	465		418	519	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.02	0.53		0.49	1.12	0.23	0.69	0.74		0.49	0.88	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 141
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 68.2 Intersection LOS: E
Intersection Capacity Utilization 88.6% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

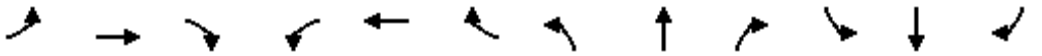
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	498	348	19	87	270	478	48	586	118	477	461	549
Future Volume (vph)	498	348	19	87	270	478	48	586	118	477	461	549
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.992				0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3410	1692	0	1811	1761	1299	1555	3343	0	1656	1627	1409
Flt Permitted	0.950			0.474			0.108			0.149		
Satd. Flow (perm)	3410	1692	0	904	1761	1299	177	3343	0	260	1627	1409
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		2						11				388
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	508	374	0	89	276	488	49	718	0	487	470	560
Turn Type	Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8		7	4	5
Permitted Phases		10		6	10	6	8			4		4
Detector Phase	5	2		1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0		3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0		8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	33.0	65.0		25.0	57.0	38.0	8.0	42.0		38.0	72.0	33.0
Total Split (%)	17.4%	34.2%		13.2%	30.0%	20.0%	4.2%	22.1%		20.0%	37.9%	17.4%
Maximum Green (s)	28.0	60.0		20.0	52.0	33.0	3.0	37.0		33.0	67.0	28.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	28.1	48.0		31.4	28.5	56.0	64.7	37.1		70.5	42.5	70.6
Actuated g/C Ratio	0.19	0.32		0.21	0.19	0.38	0.43	0.25		0.47	0.29	0.47
v/c Ratio	0.79	0.68		0.37	0.82	1.00	0.15	0.85		1.12	1.01	0.64
Control Delay	68.1	47.7		39.0	68.2	70.0	38.4	63.9		128.0	96.9	7.5

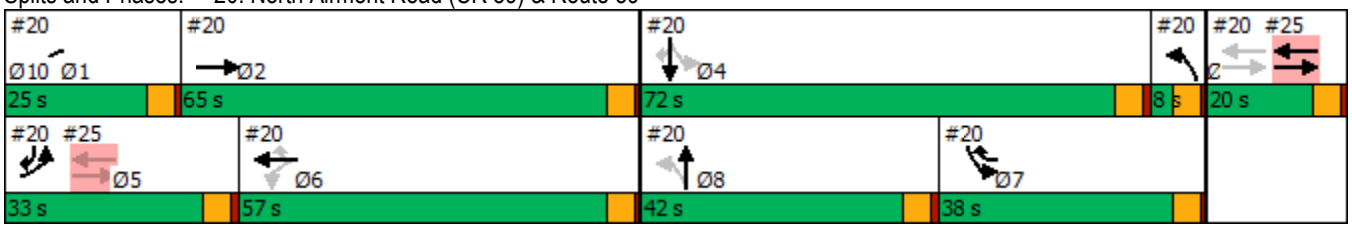
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	68.1	47.7		39.0	68.2	70.0	38.4	63.9		128.0	96.9	7.5
LOS	E	D		D	E	E	D	E		F	F	A
Approach Delay		59.5			66.2			62.3			73.9	
Approach LOS		E			E			E			E	
Queue Length 50th (ft)	239	305		51	255	222	23	338		~459	~513	49
Queue Length 95th (ft)	#361	358		109	253	#648	56	#511		#784	583	92
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330			175		170	140			100		
Base Capacity (vph)	643	749		383	684	488	334	842		433	735	872
Starvation Cap Reductn	0	0		0	0	0	0	0		0	3	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.79	0.50		0.23	0.40	1.00	0.15	0.85		1.12	0.64	0.64

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 148.8
Natural Cycle: 130
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 66.9 Intersection LOS: E
Intersection Capacity Utilization 91.5% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

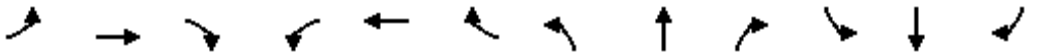
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

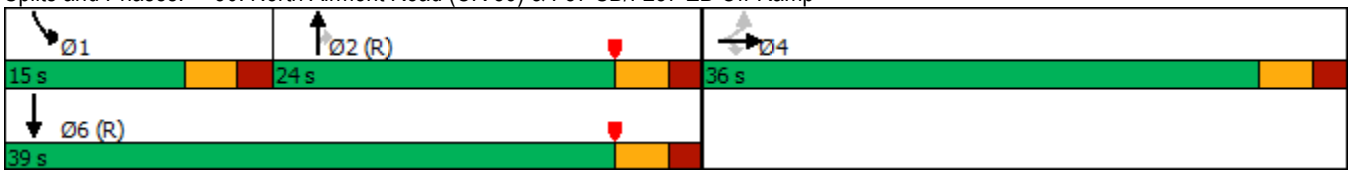


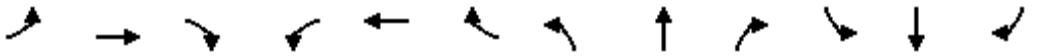
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	6	497	0	0	0	0	883	744	418	987	0
Future Volume (vph)	364	6	497	0	0	0	0	883	744	418	987	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						433			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	5%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	374	502	0	0	0	0	892	752	422	997	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					24.0	24.0	15.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					32.0%	32.0%	20.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					19.0	19.0	10.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		27.0	27.0					23.0	23.0	10.0	38.0	
Actuated g/C Ratio		0.36	0.36					0.31	0.31	0.13	0.51	
v/c Ratio		0.67	0.91					0.96	0.95	0.90	0.56	
Control Delay		25.7	39.5					43.7	30.2	47.6	9.7	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		25.7	39.5					43.7	30.2	47.6	9.7	
LOS		C	D					D	C	D	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		33.6						37.5			21.0	
Approach LOS		C						D			C	
Queue Length 50th (ft)		133	165					~254	~211	88	93	
Queue Length 95th (ft)		215	#336					#367	#400	m#126	m186	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					931	795	469	1766	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.58	0.81					0.96	0.95	0.90	0.56	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 30.7		Intersection LOS: C	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	6	497	0	0	0	0	883	744	418	987	0
Future Volume (veh/h)	364	6	497	0	0	0	0	883	744	418	987	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1844	2067	2007	0
Adj Flow Rate, veh/h	368	6	502				0	892	0	422	997	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	5	2	6	0
Cap, veh/h	598	10	525				0	811		509	1746	0
Arrive On Green	0.41	0.41	0.41				0.00	0.52	0.00	0.04	0.15	0.00
Sat Flow, veh/h	1463	24	1284				0	3226	1563	3818	3913	0
Grp Volume(v), veh/h	374	0	502				0	892	0	422	997	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1563	1909	1906	0
Q Serve(g_s), s	14.9	0.0	28.5				0.0	19.4	0.0	8.2	18.2	0.0
Cycle Q Clear(g_c), s	14.9	0.0	28.5				0.0	19.4	0.0	8.2	18.2	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	608	0	525				0	811		509	1746	0
V/C Ratio(X)	0.62	0.00	0.96				0.00	1.10		0.83	0.57	0.00
Avail Cap(c_a), veh/h	615	0	531				0	811		509	1746	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.34	0.34	0.00
Uniform Delay (d), s/veh	17.5	0.0	21.5				0.0	18.1	0.0	35.0	25.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	28.0				0.0	62.4	0.0	3.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	0.0	17.5				0.0	17.3	0.0	6.3	12.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	0.0	49.5				0.0	80.6	0.0	38.8	25.4	0.0
LnGrp LOS	B	A	D				A	F		D	C	A
Approach Vol, veh/h		876						892			1419	
Approach Delay, s/veh		36.4						80.6			29.4	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	24.4		35.6		39.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	10.0	19.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.2	0.0		30.5		0.0
Green Ext Time (p_c), s	0.0	0.0		0.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.7
HCM 6th LOS	D

Notes

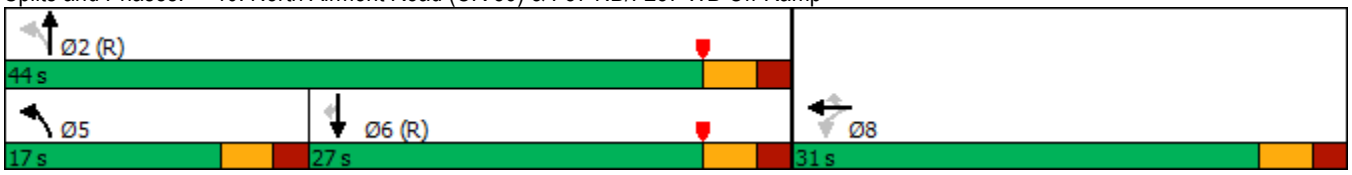
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	660	1	368	344	903	0	0	745	311
Future Volume (vph)	0	0	0	660	1	368	344	903	0	0	745	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1588	1591	1553	1344	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.139					
Satd. Flow (perm)	0	0	0	1588	1591	1553	197	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						356
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	8%	0%	4%	24%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	452	453	504	471	1237	0	0	1021	426
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	17.0	44.0			27.0	27.0
Total Split (%)				41.3%	41.3%	41.3%	22.7%	58.7%			36.0%	36.0%
Maximum Green (s)				26.0	26.0	26.0	12.0	39.0			22.0	22.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.3	24.3	24.3	40.7	40.7			23.7	23.7
Actuated g/C Ratio				0.32	0.32	0.32	0.54	0.54			0.32	0.32
v/c Ratio				0.88	0.88	0.88	1.62	0.77			0.89	0.59
Control Delay				43.9	43.9	37.6	313.2	17.6			32.6	7.6
Queue Delay				0.0	0.0	0.0	0.0	0.0			7.0	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				43.9	43.9	37.6	313.2	17.6			39.6	8.2
LOS				D	D	D	F	B			D	A
Approach Delay					41.6			99.1			30.3	
Approach LOS					D			F			C	
Queue Length 50th (ft)				198	198	171	~295	291			238	56
Queue Length 95th (ft)				233	234	204	m#333	256			188	12
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				550	551	605	290	1616			1145	717
Starvation Cap Reductn				0	0	0	0	0			99	80
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.82	0.82	0.83	1.62	0.77			0.98	0.67

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.62			
Intersection Signal Delay: 59.6		Intersection LOS: E	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Intersection	
Intersection Delay, s/veh	29.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	81	139	216	157	6	186	9	293	3	4	3
Future Vol, veh/h	0	81	139	216	157	6	186	9	293	3	4	3
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	91	156	243	176	7	209	10	329	3	4	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.3	26.7	38.1	10.5
HCM LOS	B	D	E	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	0%	57%	30%
Vol Thru, %	2%	37%	41%	40%
Vol Right, %	60%	63%	2%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	488	220	379	10
LT Vol	186	0	216	3
Through Vol	9	81	157	4
RT Vol	293	139	6	3
Lane Flow Rate	548	247	426	11
Geometry Grp	1	1	1	1
Degree of Util (X)	0.888	0.436	0.756	0.023
Departure Headway (Hd)	5.827	6.356	6.39	7.283
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	625	564	566	489
Service Time	3.827	4.42	4.445	5.367
HCM Lane V/C Ratio	0.877	0.438	0.753	0.022
HCM Control Delay	38.1	14.3	26.7	10.5
HCM Lane LOS	E	B	D	B
HCM 95th-tile Q	10.7	2.2	6.7	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	232	603	110	89	697	136	177	183	109	249	212	222
Future Volume (vph)	232	603	110	89	697	136	177	183	109	249	212	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		0	1		1	1		0	2		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt		0.977				0.850		0.944			0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1631	3283	0	1752	1810	1417	1919	1731	0	3417	1744	0
Flt Permitted	0.071			0.346			0.160			0.950		
Satd. Flow (perm)	122	3283	0	638	1810	1417	323	1731	0	3411	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				164		18			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	4%	3%	3%	5%	14%	5%	5%	4%	8%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	735	0	92	719	140	182	301	0	257	448	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases	2	9		6	9	6	8					
Detector Phase	5	2		1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0		9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	23.0	67.0		12.0	56.0	26.0	20.0	26.0		26.0	32.0	
Total Split (%)	16.4%	47.9%		8.6%	40.0%	18.6%	14.3%	18.6%		18.6%	22.9%	
Maximum Green (s)	17.0	61.0		6.0	50.0	20.0	14.0	20.0		20.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	73.1	61.7		56.0	50.6	70.5	37.6	25.0		14.4	26.7	
Actuated g/C Ratio	0.55	0.47		0.42	0.38	0.53	0.28	0.19		0.11	0.20	

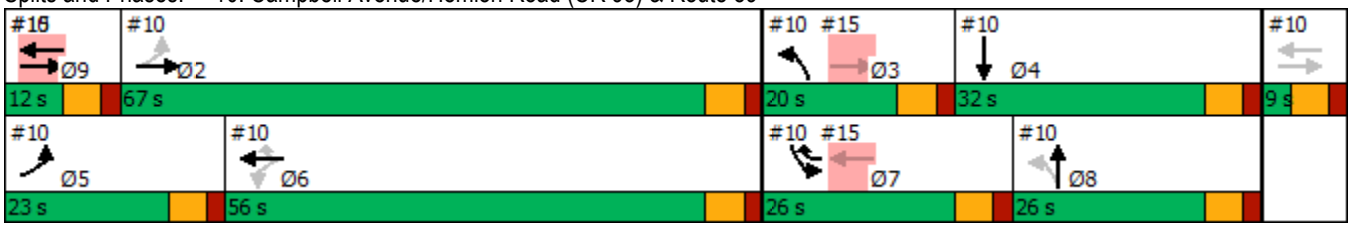
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	6%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.92	0.48		0.29	1.04	0.17	0.74	0.88		0.69	1.19	
Control Delay	74.0	24.9		19.2	84.2	1.9	52.6	76.0		67.0	149.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	74.0	24.9		19.2	84.2	1.9	52.6	76.0		67.0	149.2	
LOS	E	C		B	F	A	D	E		E	F	
Approach Delay		36.9			65.8			67.2			119.2	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	154	215		35	~659	0	110	235		110	~440	
Queue Length 95th (ft)	#360	231		76	#934	22	#224	#468		164	#691	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75			180		560	150			145		
Base Capacity (vph)	261	1544		321	693	885	264	341		517	378	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.92	0.48		0.29	1.04	0.16	0.69	0.88		0.50	1.19	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 132.2
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 69.1 Intersection LOS: E
Intersection Capacity Utilization 104.1% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

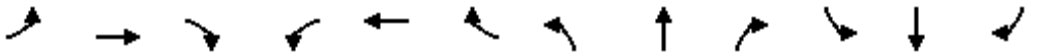
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	541	438	73	139	379	533	61	474	160	432	614	634
Future Volume (vph)	541	438	73	139	379	533	61	474	160	432	614	634
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.979				0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3345	1759	0	1829	1828	1398	1626	3279	0	1703	1739	1436
Flt Permitted	0.950			0.170			0.107			0.163		
Satd. Flow (perm)	3345	1759	0	327	1828	1398	183	3279	0	292	1739	1436
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5						22				251
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	558	527	0	143	391	549	63	654	0	445	633	654
Turn Type	Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8		7	4	5
Permitted Phases		10		6	10	6	8			4		4
Detector Phase	5	2		1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0		8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	33.0	65.0		25.0	57.0	38.0	8.0	42.0		38.0	72.0	33.0
Total Split (%)	17.4%	34.2%		13.2%	30.0%	20.0%	4.2%	22.1%		20.0%	37.9%	17.4%
Maximum Green (s)	28.0	60.0		20.0	52.0	33.0	3.0	37.0		33.0	67.0	28.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	28.2	57.8		47.4	41.2	69.0	41.8	37.3		75.6	66.0	94.2
Actuated g/C Ratio	0.17	0.36		0.29	0.25	0.43	0.26	0.23		0.47	0.41	0.58

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.96	0.84		0.70	0.84	0.92	0.72	0.85		1.04	0.89	0.70
Control Delay	93.6	57.6		51.1	67.4	47.3	87.9	69.5		110.1	62.0	13.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	6.5	0.0
Total Delay	93.6	57.6		51.1	67.4	47.3	87.9	69.5		110.1	68.6	13.1
LOS	F	E		D	E	D	F	E		F	E	B
Approach Delay		76.1			55.0			71.1			58.3	
Approach LOS		E			E			E			E	
Queue Length 50th (ft)	293	491		85	387	257	34	326		~394	590	199
Queue Length 95th (ft)	#529	526		160	358	#541	#139	#551		#816	#1069	366
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330			175		170	140			100		
Base Capacity (vph)	582	719		299	653	595	87	771		426	724	940
Starvation Cap Reductn	0	0		0	0	0	0	0		0	62	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.96	0.73		0.48	0.60	0.92	0.72	0.85		1.04	0.96	0.70

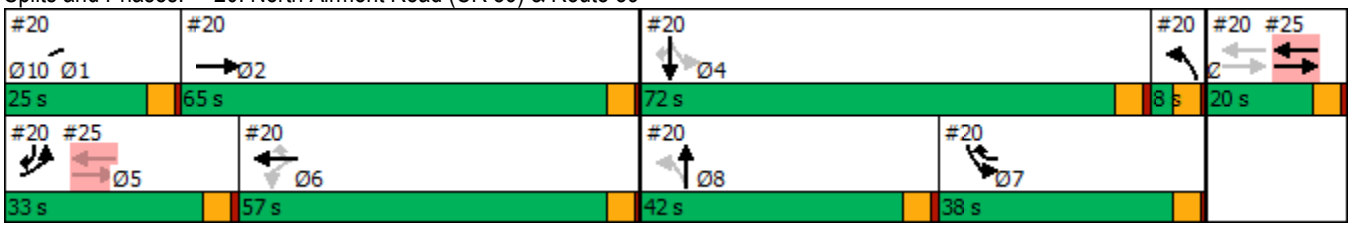
Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 161.9
Natural Cycle: 140
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 63.7 Intersection LOS: E
Intersection Capacity Utilization 101.8% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

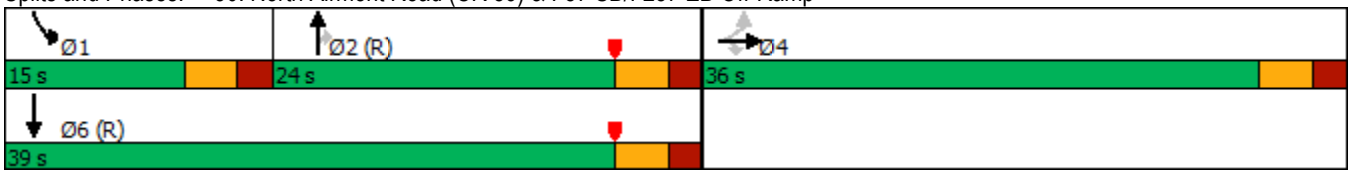
HCM 6th Edition methodology does not support clustered intersections.

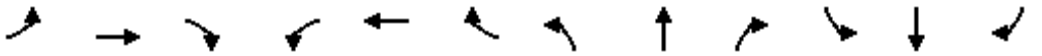
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	289	3	347	0	0	0	0	838	792	487	1346	0
Future Volume (vph)	289	3	347	0	0	0	0	838	792	487	1346	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1445	0	0	0	0	3154	1616	3485	3524	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1445	0	0	0	0	3154	1595	3481	3524	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						485			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	9%	0%	0%	0%	0%	9%	5%	3%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	295	351	0	0	0	0	846	800	492	1360	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					24.0	24.0	15.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					32.0%	32.0%	20.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					19.0	19.0	10.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		19.6	19.6					30.4	30.4	10.0	45.4	
Actuated g/C Ratio		0.26	0.26					0.41	0.41	0.13	0.61	
v/c Ratio		0.73	0.78					0.66	0.86	1.06	0.64	
Control Delay		35.1	29.2					18.1	14.2	77.0	4.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		35.1	29.2					18.1	14.2	77.0	4.6	
LOS		D	C					B	B	E	A	
Approach Delay		31.9						16.2			23.8	
Approach LOS		C						B			C	
Queue Length 50th (ft)		126	108					67	40	~112	0	
Queue Length 95th (ft)		174	170					m#298	m#385	m#175	m225	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		641	657					1278	934	464	2133	
Starvation Cap Reductn		0	0					0	0	0	140	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.46	0.53					0.66	0.86	1.06	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 22.1		Intersection LOS: C	
Intersection Capacity Utilization 128.7%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	3	347	0	0	0	0	838	792	487	1346	0
Future Volume (veh/h)	289	3	347	0	0	0	0	838	792	487	1346	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1619				0	1714	1844	2052	2022	0
Adj Flow Rate, veh/h	292	3	351				0	846	0	492	1360	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	9				0	9	5	3	5	0
Cap, veh/h	476	5	395				0	1233		505	2223	0
Arrive On Green	0.29	0.29	0.29				0.00	0.76	0.00	0.13	0.58	0.00
Sat Flow, veh/h	1653	17	1372				0	3342	1563	3791	3942	0
Grp Volume(v), veh/h	295	0	351				0	846	0	492	1360	0
Grp Sat Flow(s),veh/h/ln	1670	0	1372				0	1628	1563	1895	1921	0
Q Serve(g_s), s	11.5	0.0	18.4				0.0	9.8	0.0	9.7	17.3	0.0
Cycle Q Clear(g_c), s	11.5	0.0	18.4				0.0	9.8	0.0	9.7	17.3	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	481	0	395				0	1233		505	2223	0
V/C Ratio(X)	0.61	0.00	0.89				0.00	0.69		0.97	0.61	0.00
Avail Cap(c_a), veh/h	690	0	567				0	1233		505	2223	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.17	0.17	0.00
Uniform Delay (d), s/veh	23.1	0.0	25.6				0.0	6.8	0.0	32.4	10.3	0.0
Incr Delay (d2), s/veh	0.5	0.0	9.2				0.0	3.1	0.0	11.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	10.9				0.0	4.3	0.0	6.6	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	0.0	34.7				0.0	10.0	0.0	43.4	10.5	0.0
LnGrp LOS	C	A	C				A	A		D	B	A
Approach Vol, veh/h		646						846			1852	
Approach Delay, s/veh		29.6						10.0			19.2	
Approach LOS		C						A			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	33.4		26.6		48.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	10.0	19.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	11.7	0.0		20.4		0.0
Green Ext Time (p_c), s	0.0	0.0		1.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

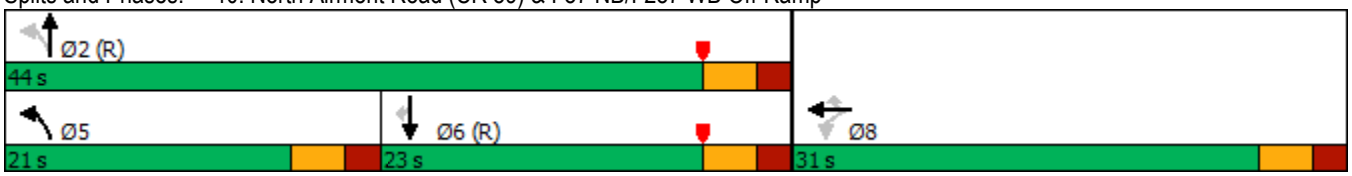
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	852	2	490	412	715	0	0	981	483
Future Volume (vph)	0	0	0	852	2	490	412	715	0	0	981	483
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1649	1654	1583	1462	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.157					
Satd. Flow (perm)	0	0	0	1649	1654	1583	241	3064	0	0	3593	1507
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						173						390
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	4%	3%	2%	14%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	434	437	500	420	730	0	0	1001	493
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	21.0	44.0			23.0	23.0
Total Split (%)				41.3%	41.3%	41.3%	28.0%	58.7%			30.7%	30.7%
Maximum Green (s)				26.0	26.0	26.0	16.0	39.0			18.0	18.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				23.5	23.5	23.5	41.5	41.5			20.5	20.5
Actuated g/C Ratio				0.31	0.31	0.31	0.55	0.55			0.27	0.27
v/c Ratio				0.84	0.84	0.81	1.07	0.43			1.02	0.71
Control Delay				39.7	39.9	26.9	77.5	5.3			64.2	21.8
Queue Delay				0.1	0.1	0.0	0.0	0.0			30.3	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				39.8	40.1	26.9	77.5	5.3			94.5	22.5
LOS				D	D	C	E	A			F	C
Approach Delay					35.2			31.7			70.8	
Approach LOS					D			C			E	
Queue Length 50th (ft)				185	187	133	~182	93			~309	130
Queue Length 95th (ft)				#330	#333	#270	#333	19			#434	#250
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				571	573	661	393	1696			983	695
Starvation Cap Reductn				0	0	0	0	0			83	45
Spillback Cap Reductn				4	4	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.77	0.77	0.76	1.07	0.43			1.11	0.76

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 47.4		Intersection LOS: D	
Intersection Capacity Utilization 128.7%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



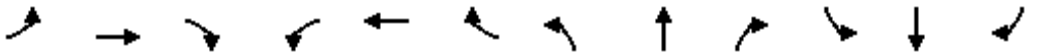
HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Intersection	
Intersection Delay, s/veh	29.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	81	139	216	157	6	186	9	293	3	4	3
Future Vol, veh/h	0	81	139	216	157	6	186	9	293	3	4	3
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	91	156	243	176	7	209	10	329	3	4	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.3	26.7	38.1	10.5
HCM LOS	B	D	E	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	0%	57%	30%
Vol Thru, %	2%	37%	41%	40%
Vol Right, %	60%	63%	2%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	488	220	379	10
LT Vol	186	0	216	3
Through Vol	9	81	157	4
RT Vol	293	139	6	3
Lane Flow Rate	548	247	426	11
Geometry Grp	1	1	1	1
Degree of Util (X)	0.888	0.436	0.756	0.023
Departure Headway (Hd)	5.827	6.356	6.39	7.283
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	625	564	566	489
Service Time	3.827	4.42	4.445	5.367
HCM Lane V/C Ratio	0.877	0.438	0.753	0.022
HCM Control Delay	38.1	14.3	26.7	10.5
HCM Lane LOS	E	B	D	B
HCM 95th-tile Q	10.7	2.2	6.7	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	530	50	141	556	80	136	213	65	152	213	166
Future Volume (vph)	200	530	50	141	556	80	136	213	65	152	213	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98		0.99		1.00	0.99	
Frt			0.850			0.850		0.965			0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1749	1432	1752	1727	1482	1901	1739	0	1745	1769	0
Flt Permitted	0.117			0.117			0.134			0.307		
Satd. Flow (perm)	207	1749	1432	216	1727	1445	268	1739	0	563	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			138		13			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	5%	9%	3%	10%	9%	6%	5%	11%	9%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	244	646	61	172	678	98	166	339	0	185	462	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.3	35.3	49.0	43.3	35.3	43.1	38.5	29.8		38.7	29.9	
Actuated g/C Ratio	0.40	0.32	0.45	0.40	0.32	0.39	0.35	0.27		0.35	0.27	

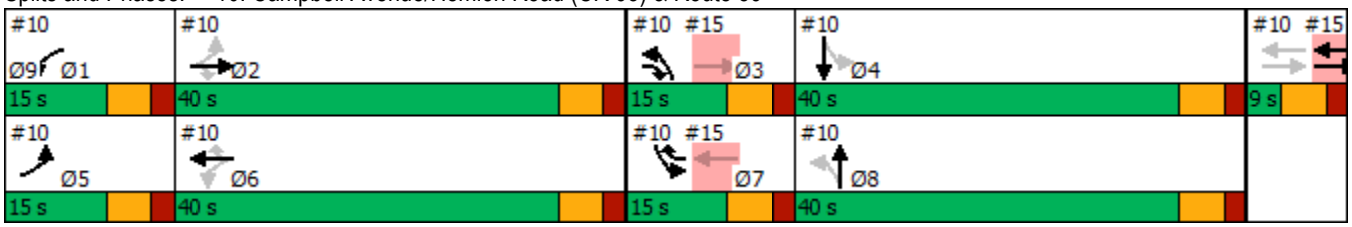
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.20	1.15	0.09	0.81	1.22	0.15	0.74	0.70		0.63	0.91	
Control Delay	154.2	119.6	0.2	52.7	146.9	1.8	43.2	43.5		33.6	59.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	154.2	119.6	0.2	52.7	146.9	1.8	43.2	43.5		33.6	59.6	
LOS	F	F	A	D	F	A	D	D		C	E	
Approach Delay		120.9			114.8			43.4			52.2	
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	~159	~543	0	71	~594	0	70	196		79	281	
Queue Length 95th (ft)	#311	#713	0	#177	#768	7	#131	289		132	#407	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	203	564	721	212	557	658	230	553		298	576	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.20	1.15	0.08	0.81	1.22	0.15	0.72	0.61		0.62	0.80	

Intersection Summary

Area Type: Other
Cycle Length: 119
Actuated Cycle Length: 109.4
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.22
Intersection Signal Delay: 91.6 Intersection LOS: F
Intersection Capacity Utilization 89.3% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

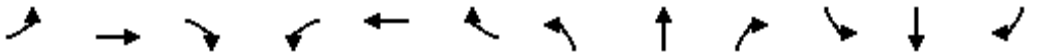
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	502	362	20	91	275	501	50	616	124	501	484	528
Future Volume (vph)	502	362	20	91	275	501	50	616	124	501	484	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1792	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1422
Flt Permitted	0.139			0.530			0.100			0.142		
Satd. Flow (perm)	262	1724	1168	1011	1761	1299	164	3343	0	248	1627	1422
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				369
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	512	369	20	93	281	511	51	756	0	511	494	539
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	58.9	50.7	69.2	32.6	29.4	53.9	63.9	40.1		70.2	46.1	76.2
Actuated g/C Ratio	0.39	0.33	0.46	0.21	0.19	0.36	0.42	0.26		0.46	0.30	0.50
v/c Ratio	1.26	0.64	0.03	0.35	0.83	1.11	0.18	0.85		1.30	1.00	0.60
Control Delay	175.8	45.4	0.1	38.1	69.4	103.6	40.8	62.8		194.3	91.9	6.4

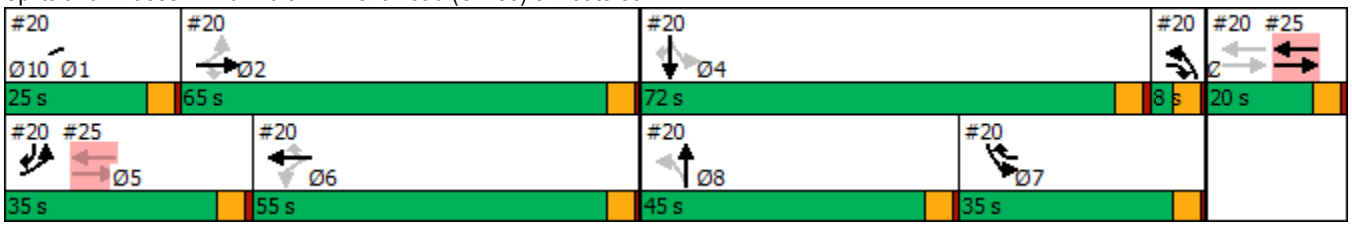
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.1	0.0
Total Delay	175.8	45.4	0.1	38.1	69.4	103.6	40.8	62.8		194.3	92.1	6.4
LOS	F	D	A	D	E	F	D	E		F	F	A
Approach Delay		118.5			85.9			61.4			96.0	
Approach LOS		F			F			E			F	
Queue Length 50th (ft)	~548	301	0	54	265	258	25	362		~559	~551	45
Queue Length 95th (ft)	#915	349	0	112	256	#802	#81	#538		#898	606	74
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	405	748	586	398	647	461	290	892		394	721	898
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	14	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.26	0.49	0.03	0.23	0.43	1.11	0.18	0.85		1.30	0.70	0.60

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 151.7
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.30
Intersection Signal Delay: 92.0 Intersection LOS: F
Intersection Capacity Utilization 107.7% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

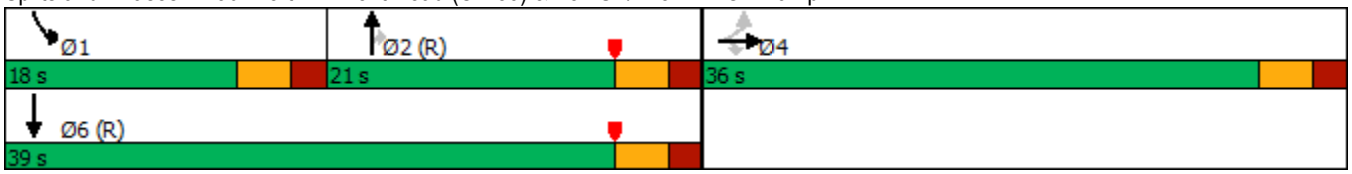
HCM 6th Edition methodology does not support clustered intersections.

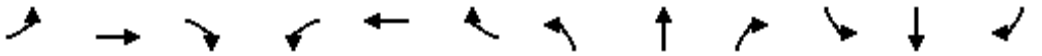
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	382	6	479	0	0	0	0	920	766	439	1030	0
Future Volume (vph)	382	6	479	0	0	0	0	920	766	439	1030	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						406			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	4%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	392	484	0	0	0	0	929	774	443	1040	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		26.3	26.3					21.4	21.4	12.3	38.7	
Actuated g/C Ratio		0.35	0.35					0.29	0.29	0.16	0.52	
v/c Ratio		0.72	0.89					1.07	1.03	0.77	0.58	
Control Delay		28.3	37.9					75.6	50.4	33.7	10.3	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		28.3	37.9					75.6	50.4	33.7	10.3	
LOS		C	D					E	D	C	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		33.6						64.2			17.3	
Approach LOS		C						E			B	
Queue Length 50th (ft)		146	159					~295	~260	83	115	
Queue Length 95th (ft)		228	#317					#420	#459	m105	m215	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					867	755	609	1800	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.61	0.78					1.07	1.03	0.73	0.58	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 40.5		Intersection LOS: D	
Intersection Capacity Utilization 93.9%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	6	479	0	0	0	0	920	766	439	1030	0
Future Volume (veh/h)	382	6	479	0	0	0	0	920	766	439	1030	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1859	2067	2007	0
Adj Flow Rate, veh/h	386	6	484				0	929	0	443	1040	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	4	2	6	0
Cap, veh/h	583	9	511				0	809		553	1787	0
Arrive On Green	0.40	0.40	0.40				0.00	0.51	0.00	0.10	0.31	0.00
Sat Flow, veh/h	1464	23	1284				0	3226	1576	3818	3913	0
Grp Volume(v), veh/h	392	0	484				0	929	0	443	1040	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1576	1909	1906	0
Q Serve(g_s), s	16.2	0.0	27.3				0.0	19.3	0.0	8.5	17.2	0.0
Cycle Q Clear(g_c), s	16.2	0.0	27.3				0.0	19.3	0.0	8.5	17.2	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	592	0	511				0	809		553	1787	0
V/C Ratio(X)	0.66	0.00	0.95				0.00	1.15		0.80	0.58	0.00
Avail Cap(c_a), veh/h	615	0	531				0	809		662	1787	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.35	0.35	0.00
Uniform Delay (d), s/veh	18.5	0.0	21.8				0.0	18.2	0.0	32.8	19.6	0.0
Incr Delay (d2), s/veh	2.0	0.0	25.5				0.0	81.1	0.0	1.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.3	0.0	16.6				0.0	20.5	0.0	6.1	10.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	0.0	47.3				0.0	99.3	0.0	34.6	20.0	0.0
LnGrp LOS	C	A	D				A	F		C	C	A
Approach Vol, veh/h		876						929			1483	
Approach Delay, s/veh		35.3						99.3			24.4	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.9	24.3		34.8		40.2
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.5	0.0		29.3		0.0
Green Ext Time (p_c), s	0.3	0.0		0.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.4
HCM 6th LOS	D

Notes

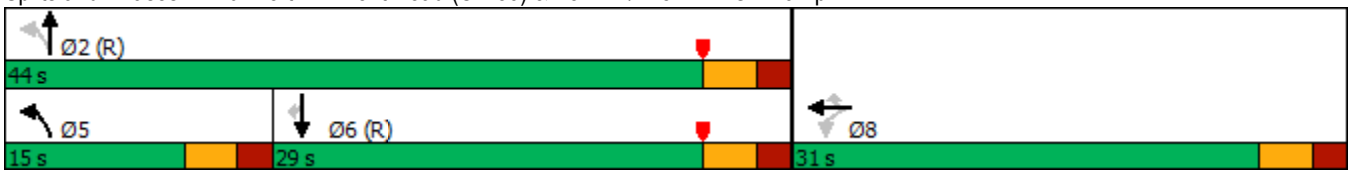
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	687	1	348	357	946	0	0	782	317
Future Volume (vph)	0	0	0	687	1	348	357	946	0	0	782	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1603	1606	1553	1355	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.132					
Satd. Flow (perm)	0	0	0	1603	1606	1553	188	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						358
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	7%	0%	4%	23%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	470	472	477	489	1296	0	0	1071	434
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.7	24.7	24.7	40.3	40.3			25.3	25.3
Actuated g/C Ratio				0.33	0.33	0.33	0.54	0.54			0.34	0.34
v/c Ratio				0.89	0.89	0.82	1.91	0.81			0.88	0.58
Control Delay				45.0	45.2	31.4	437.3	18.7			27.0	6.0
Queue Delay				0.0	0.0	0.0	0.0	0.0			6.8	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				45.0	45.2	31.4	437.3	18.7			33.8	6.6
LOS				D	D	C	F	B			C	A
Approach Delay					40.5			133.4			25.9	
Approach LOS					D			F			C	
Queue Length 50th (ft)				209	210	156	~335	312			180	34
Queue Length 95th (ft)				244	246	188	m#344	m264			156	0
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				555	556	605	256	1600			1222	742
Starvation Cap Reductn				0	0	0	0	0			121	92
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.85	0.85	0.79	1.91	0.81			0.97	0.67

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.91			
Intersection Signal Delay: 71.0		Intersection LOS: E	
Intersection Capacity Utilization 93.9%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

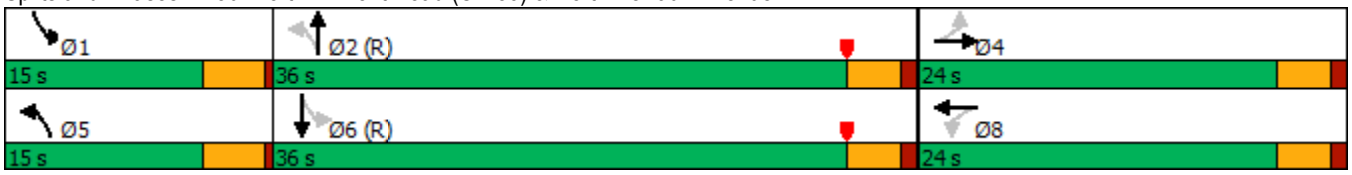
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	0	36	18	0	22	40	1567	12	24	1459	5
Future Volume (vph)	71	0	36	18	0	22	40	1567	12	24	1459	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.926			0.999			0.999	
Flt Protected		0.968			0.978		0.950			0.950		
Satd. Flow (prot)	0	1723	0	0	1671	0	1574	3321	0	1718	3291	0
Flt Permitted		0.773			0.877		0.081			0.085		
Satd. Flow (perm)	0	1376	0	0	1499	0	134	3321	0	154	3291	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		5.0			12.6			4.2			9.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	5%	0%	0%	8%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	119	0	0	44	0	44	1754	0	27	1627	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.9			11.9		56.3	53.1		55.5	50.3	
Actuated g/C Ratio		0.16			0.16		0.75	0.71		0.74	0.67	
v/c Ratio		0.43			0.15		0.15	0.75		0.08	0.74	
Control Delay		17.5			4.1		4.6	15.2		4.2	13.2	

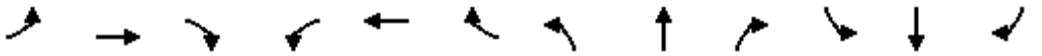
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		17.5			4.1		4.6	15.2		4.2	13.2	
LOS		B			A		A	B		A	B	
Approach Delay		17.5			4.1			14.9			13.0	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		19			0		4	174		2	205	
Queue Length 95th (ft)		61			13		14	#620		m7	#535	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		420			453		312	2351		344	2206	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.28			0.10		0.14	0.75		0.08	0.74	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 14.0 Intersection LOS: B
Intersection Capacity Utilization 59.7% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue

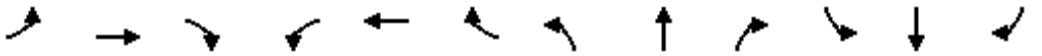




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	0	36	18	0	22	40	1567	12	24	1459	5
Future Volume (veh/h)	71	0	36	18	0	22	40	1567	12	24	1459	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1826	1900	2057	1937	1682
Adj Flow Rate, veh/h	79	0	40	20	0	24	44	1741	13	27	1621	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	5	0	0	8	25
Cap, veh/h	200	16	69	146	25	121	372	2307	17	304	2374	9
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.65	0.65	0.08	0.84	0.84
Sat Flow, veh/h	930	125	534	592	192	941	1711	3529	26	1959	3761	14
Grp Volume(v), veh/h	119	0	0	44	0	0	44	855	899	27	793	834
Grp Sat Flow(s),veh/h/ln	1590	0	0	1726	0	0	1711	1735	1821	1959	1840	1935
Q Serve(g_s), s	3.5	0.0	0.0	0.0	0.0	0.0	0.6	25.2	25.3	0.3	12.2	12.2
Cycle Q Clear(g_c), s	5.1	0.0	0.0	1.6	0.0	0.0	0.6	25.2	25.3	0.3	12.2	12.2
Prop In Lane	0.66		0.34	0.45		0.55	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	285	0	0	292	0	0	372	1134	1191	304	1161	1221
V/C Ratio(X)	0.42	0.00	0.00	0.15	0.00	0.00	0.12	0.75	0.76	0.09	0.68	0.68
Avail Cap(c_a), veh/h	495	0	0	507	0	0	486	1134	1191	479	1161	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	0.0	29.2	0.0	0.0	4.4	8.9	8.9	7.6	3.2	3.2
Incr Delay (d2), s/veh	3.5	0.0	0.0	0.9	0.0	0.0	0.5	4.7	4.5	0.5	3.3	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	0.0	0.0	1.4	0.0	0.0	0.3	13.6	14.1	0.3	5.6	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	0.0	0.0	30.0	0.0	0.0	4.9	13.5	13.4	8.1	6.5	6.3
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		119			44			1798			1654	
Approach Delay, s/veh		34.1			30.0			13.2			6.4	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	53.0		13.7	10.0	51.3		13.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	27.3		7.1	2.6	14.2		3.6				
Green Ext Time (p_c), s	0.1	4.6		1.0	0.1	16.4		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		11.0	
HCM 6th LOS		B	

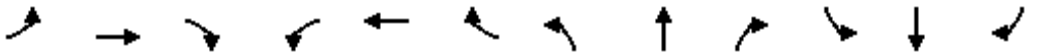


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	25	392	14	6	13	204	795	85	34	723	97
Future Volume (vph)	108	25	392	14	6	13	204	795	85	34	723	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.986			0.982	
Flt Protected		0.961		0.950			0.950			0.950		
Satd. Flow (prot)	0	1728	1433	1797	913	1242	1645	3232	0	1762	3448	0
Flt Permitted		0.762		0.641			0.196			0.288		
Satd. Flow (perm)	0	1370	1433	1213	913	1242	339	3232	0	534	3448	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			102		18			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	148	436	16	7	14	227	977	0	38	911	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		14.0	30.6	14.0	14.0	14.0	50.9	44.0		40.8	34.4	
Actuated g/C Ratio		0.19	0.41	0.19	0.19	0.19	0.68	0.59		0.54	0.46	
v/c Ratio		0.58	0.70	0.07	0.04	0.04	0.53	0.51		0.10	0.57	
Control Delay		36.5	21.3	23.6	23.2	0.2	12.7	8.5		6.3	17.2	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.5	21.3	23.6	23.2	0.2	12.7	8.5		6.3	17.2	
LOS		D	C	C	C	A	B	A		A	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		25.1			14.7			9.3			16.8	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)		64	135	6	3	0	35	112		5	154	
Queue Length 95th (ft)		110	209	20	12	0	103	173		17	240	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		456	624	404	304	482	431	1903		395	1595	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.32	0.70	0.04	0.02	0.03	0.53	0.51		0.10	0.57	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 55 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 15.3		Intersection LOS: B	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	25	392	14	6	13	204	795	85	34	723	97
Future Volume (veh/h)	108	25	392	14	6	13	204	795	85	34	723	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	120	28	436	16	7	14	227	883	94	38	803	108
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	388	80	548	606	197	462	368	1359	145	406	1392	187
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.16	0.91	0.91	0.04	0.41	0.41
Sat Flow, veh/h	971	258	1405	1578	635	1492	1717	2994	319	1919	3391	456
Grp Volume(v), veh/h	148	0	436	16	7	14	227	484	493	38	453	458
Grp Sat Flow(s),veh/h/ln	1229	0	1405	1578	635	1492	1717	1642	1671	1919	1914	1933
Q Serve(g_s), s	6.5	0.0	20.6	0.0	0.6	0.5	6.0	5.0	5.0	0.8	13.7	13.7
Cycle Q Clear(g_c), s	7.1	0.0	20.6	0.5	0.6	0.5	6.0	5.0	5.0	0.8	13.7	13.7
Prop In Lane	0.81		1.00	1.00		1.00	1.00		0.19	1.00		0.24
Lane Grp Cap(c), veh/h	467	0	548	606	197	462	368	745	758	406	786	793
V/C Ratio(X)	0.32	0.00	0.80	0.03	0.04	0.03	0.62	0.65	0.65	0.09	0.58	0.58
Avail Cap(c_a), veh/h	497	0	581	643	212	497	368	745	758	490	786	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	20.3	18.0	18.1	18.0	12.4	2.1	2.1	11.7	17.1	17.1
Incr Delay (d2), s/veh	0.4	0.0	7.3	0.0	0.1	0.0	2.9	4.0	4.0	0.1	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	11.9	0.3	0.2	0.3	3.7	2.8	2.8	0.6	10.4	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	27.5	18.1	18.1	18.1	15.3	6.1	6.1	11.8	20.2	20.1
LnGrp LOS	C	A	C	B	B	B	B	A	A	B	C	C
Approach Vol, veh/h		584			37			1204			949	
Approach Delay, s/veh		25.8			18.1			7.8			19.8	
Approach LOS		C			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	39.0		28.2	11.0	35.8		28.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	7.0		22.6	8.0	15.7		2.6				
Green Ext Time (p_c), s	0.0	3.7		0.6	0.0	2.9		0.1				

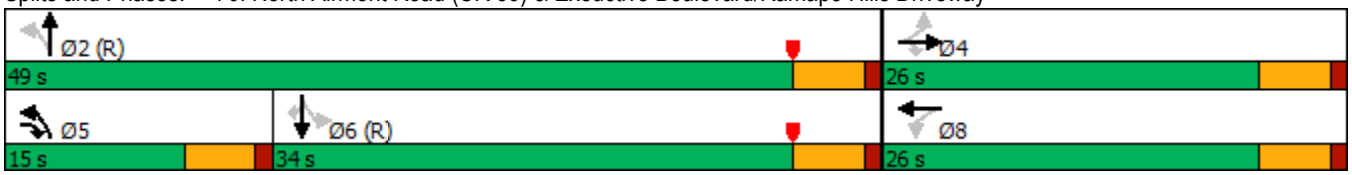
Intersection Summary												
HCM 6th Ctrl Delay			15.8									
HCM 6th LOS			B									

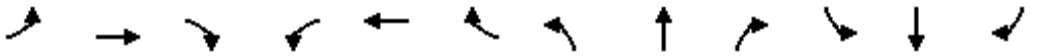
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	0	42	3	0	0	217	1055	22	1	1053	75
Future Volume (vph)	28	0	42	3	0	0	217	1055	22	1	1053	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		
Frt			0.850					0.997				0.850
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1589	1370	0	1805	0	1727	3333	0	1806	3492	1577
Flt Permitted							0.176			0.239		
Satd. Flow (perm)	0	1673	1370	0	1900	0	320	3333	0	454	3492	1577
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29					5				102
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		5.2			4.8			6.6			11.1	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	6%	0%	10%	0%	0%	0%	0%	7%	0%	0%	7%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	46	0	3	0	238	1183	0	1	1157	82
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	26.0	26.0	15.0	26.0	26.0		15.0	49.0		34.0	34.0	34.0
Total Split (%)	34.7%	34.7%	20.0%	34.7%	34.7%		20.0%	65.3%		45.3%	45.3%	45.3%
Maximum Green (s)	21.0	21.0	10.0	21.0	21.0		10.0	44.0		29.0	29.0	29.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		7.6	15.4		7.2		64.2	67.2		49.6	49.6	49.6
Actuated g/C Ratio		0.10	0.21		0.10		0.86	0.90		0.66	0.66	0.66
v/c Ratio		0.18	0.15		0.02		0.52	0.40		0.00	0.50	0.08
Control Delay		32.4	10.3		29.3		10.0	1.8		17.0	11.5	4.9
Queue Delay		0.0	0.0		0.0		0.3	0.0		0.0	0.1	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		32.4	10.3		29.3		10.3	1.9		17.0	11.6	4.9
LOS		C	B		C		B	A		B	B	A
Approach Delay		19.2			29.3			3.3			11.1	
Approach LOS		B			C			A			B	
Queue Length 50th (ft)		14	7		1		22	0		0	43	0
Queue Length 95th (ft)		37	23		9		m57	95		m0	305	m16
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		468	341		532		494	2988		299	2308	1077
Starvation Cap Reductn		0	0		0		39	266		0	0	0
Spillback Cap Reductn		0	1		0		0	0		0	201	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.07	0.14		0.01		0.52	0.43		0.00	0.55	0.08

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 44 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 7.3		Intersection LOS: A	
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	0	42	3	0	0	217	1055	22	1	1053	75
Future Volume (veh/h)	28	0	42	3	0	0	217	1055	22	1	1053	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1752	1900	1900	1900	1876	1773	1876	2175	2070	2085
Adj Flow Rate, veh/h	31	0	46	3	0	0	238	1159	24	1	1157	82
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	0	10	0	0	0	0	7	0	0	7	6
Cap, veh/h	174	0	183	181	0	0	483	2742	57	469	2663	1196
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.00	0.14	1.00	1.00	0.68	0.68	0.68
Sat Flow, veh/h	1451	0	1485	1579	0	0	1787	3374	70	551	3933	1766
Grp Volume(v), veh/h	31	0	46	3	0	0	238	578	605	1	1157	82
Grp Sat Flow(s),veh/h/ln	1451	0	1485	1579	0	0	1787	1684	1760	551	1967	1766
Q Serve(g_s), s	1.4	0.0	2.1	0.0	0.0	0.0	2.9	0.0	0.0	0.0	10.1	1.2
Cycle Q Clear(g_c), s	1.5	0.0	2.1	0.1	0.0	0.0	2.9	0.0	0.0	0.0	10.1	1.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	174	0	183	181	0	0	483	1368	1430	469	2663	1196
V/C Ratio(X)	0.18	0.00	0.25	0.02	0.00	0.00	0.49	0.42	0.42	0.00	0.43	0.07
Avail Cap(c_a), veh/h	500	0	518	507	0	0	599	1368	1430	469	2663	1196
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.48	0.48	0.48	0.76	0.76	0.76
Uniform Delay (d), s/veh	34.3	0.0	29.8	33.6	0.0	0.0	3.7	0.0	0.0	3.9	5.5	4.1
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.0	0.0	0.0	0.4	0.5	0.4	0.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	1.4	0.1	0.0	0.0	0.9	0.3	0.3	0.0	5.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	30.5	33.6	0.0	0.0	4.1	0.5	0.4	3.9	5.9	4.2
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		77			3			1421			1240	
Approach Delay, s/veh		32.2			33.6			1.1			5.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		65.9		9.1	10.2	55.8		9.1				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		44.0		21.0	10.0	29.0		21.0				
Max Q Clear Time (g_c+I1), s		2.0		4.1	4.9	12.1		2.1				
Green Ext Time (p_c), s		5.0		0.2	0.3	5.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.1									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	11	456	18	10	528
Future Vol, veh/h	8	11	456	18	10	528
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	8	0	0	7
Mvmt Flow	13	17	724	29	16	838

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1609	739	0	0	753	0
Stage 1	739	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	238	496	-	-	866	-
Stage 1	661	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	230	496	-	-	866	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	661	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.8	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	334	866	-
HCM Lane V/C Ratio	-	-	0.09	0.018	-
HCM Control Delay (s)	-	-	16.8	9.2	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	727	20	83	770	8	157
Future Vol, veh/h	727	20	83	770	8	157
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	11	7	17	3
Mvmt Flow	757	21	86	802	8	164

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	778	0	1742	768
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	974	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	800	-	129	436
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	427	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	800	-	115	436
Mov Cap-2 Maneuver	-	-	-	-	251	-
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	381	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	19.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	421	-	-	800	-
HCM Lane V/C Ratio	0.408	-	-	0.108	-
HCM Control Delay (s)	19.3	-	-	10	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	1.9	-	-	0.4	-

Intersection	
Int Delay, s/veh	50.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	152	214	254	78	2	92	1	183	2	1	0
Future Vol, veh/h	0	152	214	254	78	2	92	1	183	2	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	211	297	353	108	3	128	1	254	3	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	111	0	0	508	0	0	1176	1177	360	1303	1324	110
Stage 1	-	-	-	-	-	-	360	360	-	816	816	-
Stage 2	-	-	-	-	-	-	816	817	-	487	508	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1492	-	-	1027	-	-	209	250	690	161	182	955
Stage 1	-	-	-	-	-	-	691	682	-	409	431	-
Stage 2	-	-	-	-	-	-	428	471	-	597	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1492	-	-	1027	-	-	148	159	690	72	115	955
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	159	-	72	115	-
Stage 1	-	-	-	-	-	-	691	682	-	409	273	-
Stage 2	-	-	-	-	-	-	270	299	-	376	573	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.9	167.9	51.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	309	1492	-	-	1027	-	-	82
HCM Lane V/C Ratio	1.241	-	-	-	0.344	-	-	0.051
HCM Control Delay (s)	167.9	0	-	-	10.3	0	-	51.2
HCM Lane LOS	F	A	-	-	B	A	-	F
HCM 95th %tile Q(veh)	17.5	0	-	-	1.5	-	-	0.2

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	20	0	0	12	22	1636	2	5	1468	35
Future Vol, veh/h	39	0	20	0	0	12	22	1636	2	5	1468	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	67	0	40	0	0	88	33	6	50	25	7	50
Mvmt Flow	41	0	21	0	0	13	23	1722	2	5	1545	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2481	3344	791	2552	3361	862	1582	0	0	1724	0	0
Stage 1	1574	1574	-	1769	1769	-	-	-	-	-	-	-
Stage 2	907	1770	-	783	1592	-	-	-	-	-	-	-
Critical Hdwy	9.24	6.9	7.9	7.5	6.5	8.66	4.76	-	-	4.6	-	-
Critical Hdwy Stg 1	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.17	4	3.7	3.5	4	4.18	2.53	-	-	2.45	-	-
Pot Cap-1 Maneuver	*86	0	*437	*103	0	*321	*640	-	-	*548	-	-
Stage 1	*51	144	-	*88	138	-	-	-	-	-	-	-
Stage 2	*175	113	-	*357	169	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*80	0	*437	*94	0	*321	*640	-	-	*548	-	-
Mov Cap-2 Maneuver	*80	0	-	*94	0	-	-	-	-	-	-	-
Stage 1	*49	143	-	*85	133	-	-	-	-	-	-	-
Stage 2	*162	109	-	*337	167	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	64.2	16.7	0.1	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 640	-	-	80	437	321	* 548	-	-
HCM Lane V/C Ratio	0.036	-	-	0.513	0.048	0.039	0.01	-	-
HCM Control Delay (s)	10.8	-	-	90.1	13.7	16.7	11.6	-	-
HCM Lane LOS	B	-	-	F	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.2	0.2	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	2	11	0	0	0	12	244	60	53	437	5
Future Vol, veh/h	11	2	11	0	0	0	12	244	60	53	437	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	10	4	17	35	13	0
Mvmt Flow	17	3	17	0	0	0	18	370	91	80	662	8

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	1278	1323	666			670	0	0	461	0	0
Stage 1	826	826	-			-	-	-	-	-	-
Stage 2	452	497	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.2	-	-	4.45	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.29	-	-	2.515	-	-
Pot Cap-1 Maneuver	185	158	463			884	-	-	947	-	-
Stage 1	433	389	-			-	-	-	-	-	-
Stage 2	645	548	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	156	0	463			884	-	-	947	-	-
Mov Cap-2 Maneuver	156	0	-			-	-	-	-	-	-
Stage 1	421	0	-			-	-	-	-	-	-
Stage 2	558	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.2	0.3	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	884	-	-	156	463	947	-	-
HCM Lane V/C Ratio	0.021	-	-	0.107	0.043	0.085	-	-
HCM Control Delay (s)	9.2	0	-	30.8	13.1	9.2	0	-
HCM Lane LOS	A	A	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	22	255	0	0	469
Future Vol, veh/h	26	22	255	0	0	469
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	70	47	6	0	0	10
Mvmt Flow	35	29	340	0	0	625

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	965	340	0	0	340	0
Stage 1	340	-	-	-	-	-
Stage 2	625	-	-	-	-	-
Critical Hdwy	6.7	6.47	-	-	4.1	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	4.13	3.723	-	-	2.2	-
Pot Cap-1 Maneuver	239	623	-	-	1230	-
Stage 1	614	-	-	-	-	-
Stage 2	454	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	239	623	-	-	1230	-
Mov Cap-2 Maneuver	239	-	-	-	-	-
Stage 1	614	-	-	-	-	-
Stage 2	454	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	333	1230	-
HCM Lane V/C Ratio	-	-	0.192	-	-
HCM Control Delay (s)	-	-	18.4	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	315	23	9	288	46	50
Future Vol, veh/h	315	23	9	288	46	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	9	15	50	14	5	16
Mvmt Flow	463	34	13	424	68	74

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	497	0	930	480
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	450	-
Critical Hdwy	-	-	4.6	-	7.25	6.76
Critical Hdwy Stg 1	-	-	-	-	6.25	-
Critical Hdwy Stg 2	-	-	-	-	6.25	-
Follow-up Hdwy	-	-	2.65	-	3.545	3.444
Pot Cap-1 Maneuver	-	-	860	-	238	529
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	576	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	860	-	233	529
Mov Cap-2 Maneuver	-	-	-	-	233	-
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	564	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	23.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	329	-	-	860	-
HCM Lane V/C Ratio	0.429	-	-	0.015	-
HCM Control Delay (s)	23.9	-	-	9.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.1	-	-	0	-

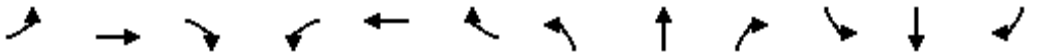
Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	289	75	73	255	42	39
Future Vol, veh/h	289	75	73	255	42	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	18	5	18	16	21
Mvmt Flow	336	87	85	297	49	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	423	0	847	380
Stage 1	-	-	-	-	380	-
Stage 2	-	-	-	-	467	-
Critical Hdwy	-	-	4.15	-	5.36	5.81
Critical Hdwy Stg 1	-	-	-	-	4.36	-
Critical Hdwy Stg 2	-	-	-	-	4.36	-
Follow-up Hdwy	-	-	2.245	-	3.644	3.489
Pot Cap-1 Maneuver	-	-	1120	-	417	668
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	704	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1120	-	379	668
Mov Cap-2 Maneuver	-	-	-	-	379	-
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	640	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	479	-	-	1120	-
HCM Lane V/C Ratio	0.197	-	-	0.076	-
HCM Control Delay (s)	14.3	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	632	115	93	728	110	185	187	115	192	204	203
Future Volume (vph)	230	632	115	93	728	110	185	187	115	192	204	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.943			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1646	1766	1516	1752	1810	1568	1919	1724	0	1847	1756	0
Flt Permitted	0.104			0.119			0.253			0.250		
Satd. Flow (perm)	180	1766	1516	220	1810	1568	511	1724	0	486	1756	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		26			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	4%	3%	3%	5%	3%	5%	5%	4%	3%	6%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	237	652	119	96	751	113	191	312	0	198	419	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.7	39.1	53.5	41.2	34.7	49.3	24.7	15.8		25.0	16.0	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.53	0.26	0.17		0.27	0.17	

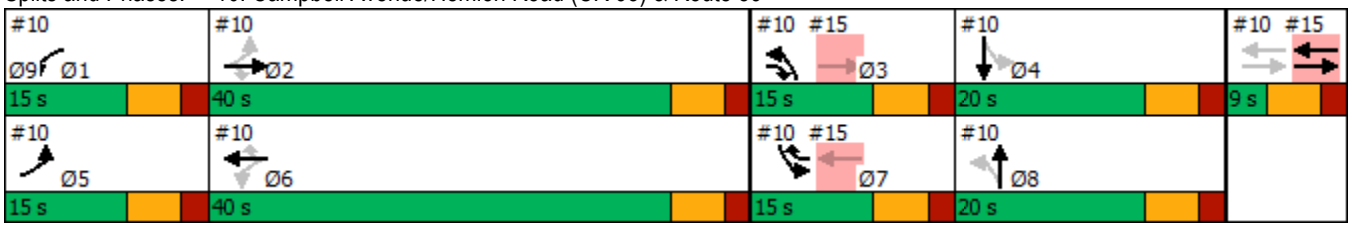
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.03	0.89	0.13	0.45	1.12	0.13	0.72	1.00		0.76	1.25	
Control Delay	95.2	43.3	1.3	20.5	103.0	1.1	41.1	88.6		45.3	168.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	95.2	43.3	1.3	20.5	103.0	1.1	41.1	88.6		45.3	168.8	
LOS	F	D	A	C	F	A	D	F		D	F	
Approach Delay		50.5			82.8			70.6			129.2	
Approach LOS		D			F			E			F	
Queue Length 50th (ft)	~92	345	0	25	~489	0	81	~186		85	~297	
Queue Length 95th (ft)	#325	#736	13	71	#878	10	#167	#323		#165	#478	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	229	735	937	249	669	902	271	312		261	334	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.03	0.89	0.13	0.39	1.12	0.13	0.70	1.00		0.76	1.25	

Intersection Summary

Area Type: Other
Cycle Length: 99
Actuated Cycle Length: 93.8
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.25
Intersection Signal Delay: 79.5 Intersection LOS: E
Intersection Capacity Utilization 104.5% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

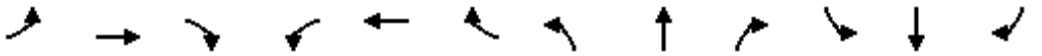
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	516	451	77	146	393	558	64	496	168	452	646	636
Future Volume (vph)	516	451	77	146	393	558	64	496	168	452	646	636
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99				
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1758	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1463
Flt Permitted	0.098			0.296			0.100			0.161		
Satd. Flow (perm)	181	1808	1424	569	1828	1398	171	3279	0	289	1739	1463
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					22				227
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	532	465	79	151	405	575	66	684	0	466	666	656
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	70.9	59.3	56.7	47.8	41.2	65.8	43.2	40.2		75.4	67.3	97.5
Actuated g/C Ratio	0.43	0.36	0.35	0.29	0.25	0.40	0.26	0.25		0.46	0.41	0.60

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.45	0.71	0.14	0.58	0.88	1.02	0.93	0.83		1.19	0.93	0.68
Control Delay	251.7	48.8	2.6	41.5	73.4	72.0	135.9	67.2		155.9	67.1	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	19.2	0.0
Total Delay	251.7	48.8	2.6	41.5	73.4	72.0	135.9	67.2		155.9	86.4	12.8
LOS	F	D	A	D	E	E	F	E		F	F	B
Approach Delay		145.7			68.4			73.3			77.5	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	~691	415	0	90	412	299	38	349		~491	656	224
Queue Length 95th (ft)	#1086	446	16	169	376	#691	#139	#528		#861	#1101	326
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	368	727	557	348	623	562	71	821		393	715	962
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	68	2
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.45	0.64	0.14	0.43	0.65	1.02	0.93	0.83		1.19	1.03	0.68

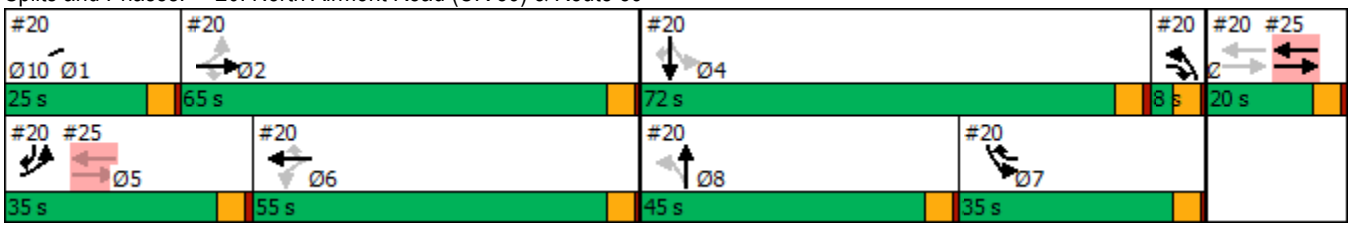
Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 163.7
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.45
Intersection Signal Delay: 90.1 Intersection LOS: F
Intersection Capacity Utilization 116.8% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

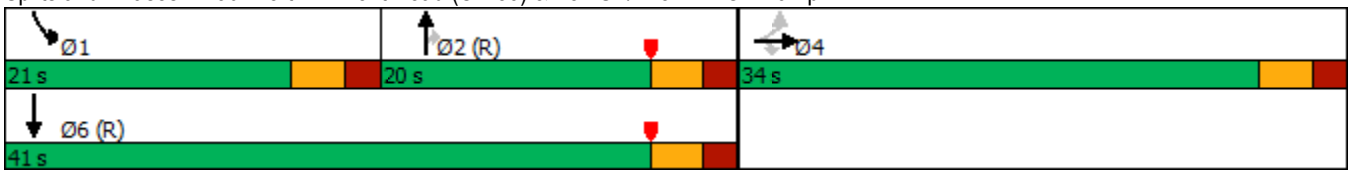
HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	303	3	344	0	0	0	0	870	788	510	1404	0
Future Volume (vph)	303	3	344	0	0	0	0	870	788	510	1404	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1550	1472	0	0	0	0	3183	1632	3485	3558	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1550	1472	0	0	0	0	3183	1610	3482	3558	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						433			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	7%	0%	0%	0%	0%	8%	4%	3%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	309	347	0	0	0	0	879	796	515	1418	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		19.8	19.8					25.8	25.8	14.5	45.2	
Actuated g/C Ratio		0.26	0.26					0.34	0.34	0.19	0.60	
v/c Ratio		0.76	0.75					0.80	0.95	0.77	0.66	
Control Delay		36.7	27.4					26.3	27.6	28.5	5.2	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		36.7	27.4					26.3	27.6	28.5	5.3	
LOS		D	C					C	C	C	A	
Approach Delay		31.8						26.9			11.5	
Approach LOS		C						C			B	
Queue Length 50th (ft)		132	104					125	49	86	1	
Queue Length 95th (ft)		187	169					m#372	m#434	m136	m241	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	631					1093	837	743	2145	
Starvation Cap Reductn		0	0					0	0	0	128	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.52	0.55					0.80	0.95	0.69	0.70	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 20.7		Intersection LOS: C	
Intersection Capacity Utilization 128.4%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	303	3	344	0	0	0	0	870	788	510	1404	0
Future Volume (veh/h)	303	3	344	0	0	0	0	870	788	510	1404	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1649				0	1728	1859	2052	2037	0
Adj Flow Rate, veh/h	306	3	347				0	879	0	515	1418	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	7				0	8	4	3	4	0
Cap, veh/h	463	5	392				0	1157		635	2269	0
Arrive On Green	0.28	0.28	0.28				0.00	0.70	0.00	0.11	0.39	0.00
Sat Flow, veh/h	1654	16	1397				0	3370	1576	3791	3971	0
Grp Volume(v), veh/h	309	0	347				0	879	0	515	1418	0
Grp Sat Flow(s),veh/h/ln	1670	0	1397				0	1642	1576	1895	1935	0
Q Serve(g_s), s	12.3	0.0	17.8				0.0	12.8	0.0	10.0	22.1	0.0
Cycle Q Clear(g_c), s	12.3	0.0	17.8				0.0	12.8	0.0	10.0	22.1	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	468	0	392				0	1157		635	2269	0
V/C Ratio(X)	0.66	0.00	0.89				0.00	0.76		0.81	0.62	0.00
Avail Cap(c_a), veh/h	646	0	540				0	1157		809	2269	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	23.8	0.0	25.8				0.0	9.1	0.0	32.1	16.1	0.0
Incr Delay (d2), s/veh	0.6	0.0	10.2				0.0	4.7	0.0	0.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.2	0.0	10.9				0.0	5.7	0.0	5.7	11.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	0.0	36.1				0.0	13.8	0.0	32.5	16.2	0.0
LnGrp LOS	C	A	D				A	B		C	B	A
Approach Vol, veh/h		656						879			1933	
Approach Delay, s/veh		30.6						13.8			20.6	
Approach LOS		C						B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.6	31.4		26.0		49.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	12.0	0.0		19.8		0.0
Green Ext Time (p_c), s	0.6	0.0		1.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

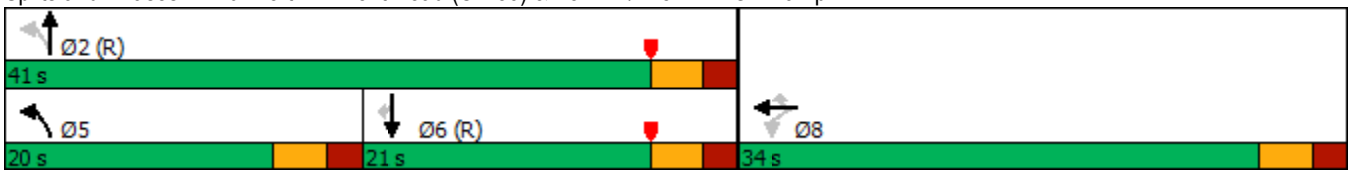
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	886	2	504	423	749	0	0	1027	471
Future Volume (vph)	0	0	0	886	2	504	423	749	0	0	1027	471
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1665	1670	1583	1488	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.161					
Satd. Flow (perm)	0	0	0	1665	1670	1583	252	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134						351
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	2%	12%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	452	454	514	432	764	0	0	1048	481
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				25.1	25.1	25.1	39.9	39.9			19.9	19.9
Actuated g/C Ratio				0.33	0.33	0.33	0.53	0.53			0.27	0.27
v/c Ratio				0.81	0.81	0.83	1.13	0.47			1.10	0.73
Control Delay				34.5	34.6	28.9	97.7	5.0			91.4	24.3
Queue Delay				0.1	0.1	0.9	0.0	0.0			0.3	0.8

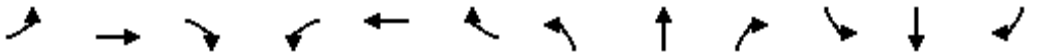
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.6	34.7	29.8	97.7	5.0			91.7	25.1
LOS				C	C	C	F	A			F	C
Approach Delay					32.9			38.5			70.8	
Approach LOS					C			D			E	
Queue Length 50th (ft)				190	191	156	~199	42			~336	132
Queue Length 95th (ft)				292	293	#269	m#298	m22			#487	#280
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				643	645	694	381	1628			951	656
Starvation Cap Reductn				0	0	0	0	0			52	39
Spillback Cap Reductn				9	9	45	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.71	0.71	0.79	1.13	0.47			1.17	0.78

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 48.5		Intersection LOS: D	
Intersection Capacity Utilization 128.4%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



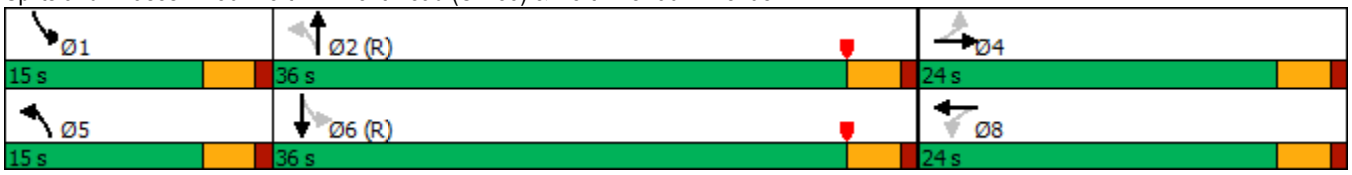
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	2	34	61	2	64	43	1456	72	70	1638	13
Future Volume (vph)	71	2	34	61	2	64	43	1456	72	70	1638	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.993			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1845	0	1589	3308	0	1718	3420	0
Flt Permitted		0.698			0.815		0.092			0.087		
Satd. Flow (perm)	0	1286	0	0	1539	0	154	3308	0	157	3420	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			67			8			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		4.1			10.5			4.2			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	5%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	0	0	138	0	47	1661	0	76	1794	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		13.1			13.1		53.4	46.1		54.4	49.1	
Actuated g/C Ratio		0.17			0.17		0.71	0.61		0.73	0.65	
v/c Ratio		0.46			0.43		0.16	0.82		0.23	0.80	
Control Delay		26.3			18.7		5.2	21.1		9.6	16.5	

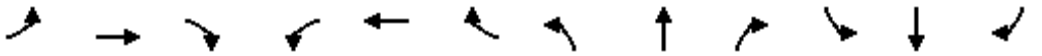
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.3			18.7		5.2	21.1		9.6	16.5	
LOS		C			B		A	C		A	B	
Approach Delay		26.3			18.7			20.6			16.2	
Approach LOS		C			B			C			B	
Queue Length 50th (ft)		36			29		5	348		8	195	
Queue Length 95th (ft)		78			73		16	#599		m30	#634	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		365			459		321	2038		343	2237	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.32			0.30		0.15	0.82		0.22	0.80	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 18.6 Intersection LOS: B
Intersection Capacity Utilization 72.9% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue

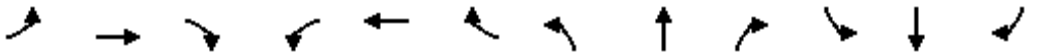




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	2	34	61	2	64	43	1456	72	70	1638	13
Future Volume (veh/h)	71	2	34	61	2	64	43	1456	72	70	1638	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1826	1900	2057	1997	2057
Adj Flow Rate, veh/h	77	2	37	66	2	70	47	1583	78	76	1780	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	5	0	0	4	0
Cap, veh/h	210	21	71	162	20	115	347	2024	99	384	2408	19
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.14	0.83	0.83
Sat Flow, veh/h	983	155	533	687	153	865	1725	3366	165	1959	3859	30
Grp Volume(v), veh/h	116	0	0	138	0	0	47	813	848	76	874	920
Grp Sat Flow(s),veh/h/ln	1670	0	0	1706	0	0	1725	1735	1796	1959	1897	1992
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	0.7	26.4	26.8	0.9	15.2	15.3
Cycle Q Clear(g_c), s	4.4	0.0	0.0	5.3	0.0	0.0	0.7	26.4	26.8	0.9	15.2	15.3
Prop In Lane	0.66		0.32	0.48		0.51	1.00		0.09	1.00		0.02
Lane Grp Cap(c), veh/h	301	0	0	297	0	0	347	1043	1080	384	1184	1243
V/C Ratio(X)	0.38	0.00	0.00	0.46	0.00	0.00	0.14	0.78	0.79	0.20	0.74	0.74
Avail Cap(c_a), veh/h	501	0	0	506	0	0	456	1043	1080	464	1184	1243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	0.0	30.5	0.0	0.0	5.3	11.2	11.3	9.1	3.7	3.7
Incr Delay (d2), s/veh	2.9	0.0	0.0	4.1	0.0	0.0	0.6	5.8	5.8	0.9	4.1	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	0.0	4.7	0.0	0.0	0.4	15.1	15.7	0.9	6.9	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	0.0	0.0	34.5	0.0	0.0	6.0	17.0	17.0	10.0	7.8	7.7
LnGrp LOS	C	A	A	C	A	A	A	B	B	B	A	A
Approach Vol, veh/h		116			138			1708			1870	
Approach Delay, s/veh		33.0			34.5			16.7			7.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	49.1		13.9	10.2	50.8		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.9	28.8		6.4	2.7	17.3		7.3				
Green Ext Time (p_c), s	0.3	3.1		1.0	0.1	14.1		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			13.5									
HCM 6th LOS			B									

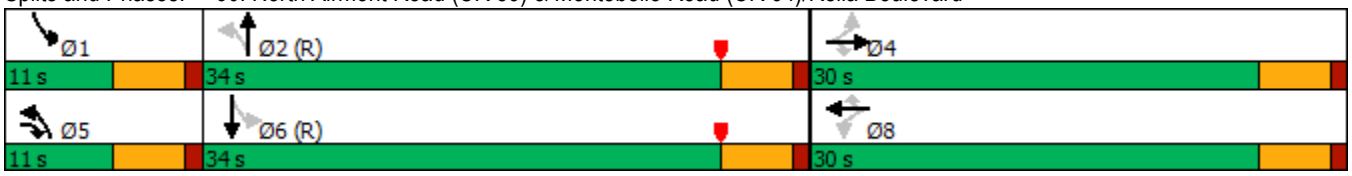


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	9	261	98	36	77	319	864	51	37	1031	130
Future Volume (vph)	139	9	261	98	36	77	319	864	51	37	1031	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.992			0.983	
Flt Protected		0.955		0.950			0.950			0.950		
Satd. Flow (prot)	0	1666	1433	1762	1723	1553	1710	3355	0	1745	3544	0
Flt Permitted		0.711		0.631			0.120			0.297		
Satd. Flow (perm)	0	1240	1433	1170	1723	1553	216	3355	0	546	3544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			102		9			21	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	155	275	103	38	81	336	963	0	39	1222	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		15.2	36.7	15.2	15.2	15.2	49.3	42.8		34.7	28.3	
Actuated g/C Ratio		0.20	0.49	0.20	0.20	0.20	0.66	0.57		0.46	0.38	
v/c Ratio		0.62	0.38	0.44	0.11	0.21	0.71	0.50		0.11	0.90	
Control Delay		37.4	12.9	30.8	22.9	4.7	30.0	13.0		7.2	32.6	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		37.4	12.9	30.8	22.9	4.7	30.0	13.0		7.2	32.6	
LOS		D	B	C	C	A	C	B		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		21.7			19.9			17.4			31.9	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)		67	68	43	15	0	98	138		5	267	
Queue Length 95th (ft)		113	124	78	34	22	#298	217		19	#395	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		413	715	390	574	585	470	1917		356	1383	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.38	0.38	0.26	0.07	0.14	0.71	0.50		0.11	0.88	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 23.8		Intersection LOS: C	
Intersection Capacity Utilization 77.7%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

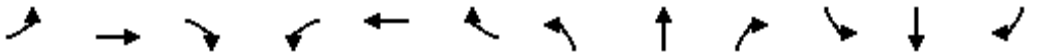
Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	9	261	98	36	77	319	864	51	37	1031	130
Future Volume (veh/h)	139	9	261	98	36	77	319	864	51	37	1031	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	146	9	275	103	38	81	336	909	54	39	1085	137
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	329	17	413	485	438	387	366	1788	106	434	1757	222
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.11	0.73	0.73	0.04	0.51	0.51
Sat Flow, veh/h	1101	81	1405	1583	2046	1810	1773	3257	194	1904	3473	438
Grp Volume(v), veh/h	155	0	275	103	38	81	336	474	489	39	607	615
Grp Sat Flow(s),veh/h/ln	1181	0	1405	1583	2046	1810	1773	1698	1753	1904	1944	1967
Q Serve(g_s), s	8.3	0.0	12.9	0.0	1.1	2.8	6.0	9.0	9.0	0.7	16.8	16.9
Cycle Q Clear(g_c), s	9.4	0.0	12.9	3.2	1.1	2.8	6.0	9.0	9.0	0.7	16.8	16.9
Prop In Lane	0.94		1.00	1.00		1.00	1.00		0.11	1.00		0.22
Lane Grp Cap(c), veh/h	346	0	413	485	438	387	366	932	962	434	983	995
V/C Ratio(X)	0.45	0.00	0.67	0.21	0.09	0.21	0.92	0.51	0.51	0.09	0.62	0.62
Avail Cap(c_a), veh/h	496	0	581	674	682	603	366	932	962	516	983	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	0.0	23.2	24.4	23.6	24.3	16.2	5.8	5.8	8.2	13.3	13.3
Incr Delay (d2), s/veh	0.9	0.0	1.9	0.2	0.1	0.3	25.3	1.7	1.7	0.1	2.9	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	0.0	7.7	2.7	1.0	2.1	9.3	4.8	4.9	0.5	11.8	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	0.0	25.1	24.7	23.7	24.5	41.6	7.5	7.5	8.3	16.2	16.2
LnGrp LOS	C	A	C	C	C	C	D	A	A	A	B	B
Approach Vol, veh/h		430			222			1299			1261	
Approach Delay, s/veh		26.2			24.4			16.3			16.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	46.2		21.0	11.0	43.0		21.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.7	11.0		14.9	8.0	18.9		5.2				
Green Ext Time (p_c), s	0.0	3.4		1.2	0.0	3.7		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		18.1	
HCM 6th LOS		B	



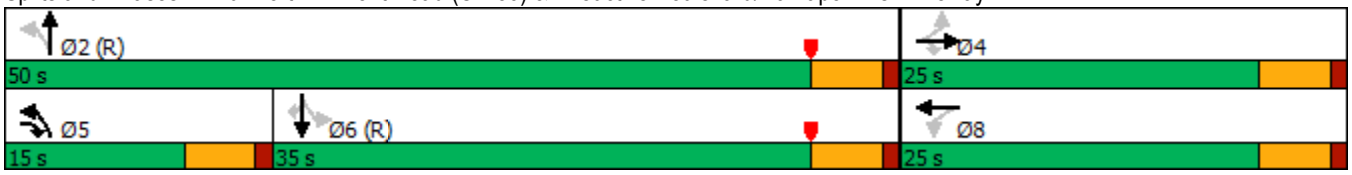
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	0	141	17	0	4	83	1149	20	5	1340	45
Future Volume (vph)	81	0	141	17	0	4	83	1149	20	5	1340	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		0.98
Frt			0.850		0.975			0.997				0.850
Flt Protected		0.950			0.961		0.950			0.950		
Satd. Flow (prot)	0	1604	1507	0	1780	0	1661	3427	0	1806	3593	1623
Flt Permitted		0.743			0.736		0.106			0.231		
Satd. Flow (perm)	0	1255	1507	0	1363	0	185	3427	0	439	3593	1587
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29		102			4				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%	4%	4%	0%	0%	4%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	147	0	22	0	86	1218	0	5	1396	47
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	50.0		35.0	35.0	35.0
Total Split (%)	33.3%	33.3%	20.0%	33.3%	33.3%		20.0%	66.7%		46.7%	46.7%	46.7%
Maximum Green (s)	20.0	20.0	10.0	20.0	20.0		10.0	45.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	0
Act Effct Green (s)		10.6	20.5		10.6		56.6	57.6		44.5	44.5	44.5
Actuated g/C Ratio		0.14	0.27		0.14		0.75	0.77		0.59	0.59	0.59

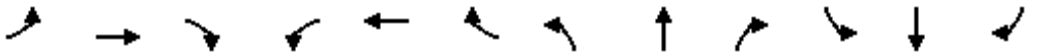
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.47	0.34		0.08		0.31	0.46		0.02	0.66	0.05
Control Delay		37.5	17.1		0.6		9.5	6.9		3.4	6.3	0.3
Queue Delay		0.0	2.7		0.3		0.0	0.6		0.0	31.5	0.0
Total Delay		37.5	19.8		0.9		9.5	7.5		3.4	37.8	0.3
LOS		D	B		A		A	A		A	D	A
Approach Delay		26.2			0.9			7.6			36.5	
Approach LOS		C			A			A			D	
Queue Length 50th (ft)		37	41		0		12	111		0	27	0
Queue Length 95th (ft)		73	75		0		m37	200		m1	m368	m1
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		334	490		438		336	2632		260	2130	982
Starvation Cap Reductn		0	0		0		0	900		0	0	0
Spillback Cap Reductn		0	243		242		0	0		0	810	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.25	0.60		0.11		0.26	0.70		0.02	1.06	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 8 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 22.9		Intersection LOS: C	
Intersection Capacity Utilization 62.4%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	0	141	17	0	4	83	1149	20	5	1340	45
Future Volume (veh/h)	81	0	141	17	0	4	83	1149	20	5	1340	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1900	1900	1900	1900	1817	1817	1876	2175	2115	2130
Adj Flow Rate, veh/h	84	0	147	18	0	4	86	1197	21	5	1396	47
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	0	0	0	4	4	0	0	4	3
Cap, veh/h	268	0	278	234	9	35	353	2602	46	430	2521	1132
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.07	1.00	1.00	0.63	0.63	0.63
Sat Flow, veh/h	1469	0	1610	1255	76	296	1731	3472	61	533	4019	1804
Grp Volume(v), veh/h	84	0	147	22	0	0	86	595	623	5	1396	47
Grp Sat Flow(s),veh/h/ln	1469	0	1610	1627	0	0	1731	1726	1806	533	2010	1804
Q Serve(g_s), s	3.1	0.0	6.2	0.0	0.0	0.0	1.1	0.1	0.1	0.3	14.9	0.7
Cycle Q Clear(g_c), s	3.9	0.0	6.2	0.8	0.0	0.0	1.1	0.1	0.1	0.3	14.9	0.7
Prop In Lane	1.00		1.00	0.82		0.18	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	268	0	278	278	0	0	353	1294	1354	430	2521	1132
V/C Ratio(X)	0.31	0.00	0.53	0.08	0.00	0.00	0.24	0.46	0.46	0.01	0.55	0.04
Avail Cap(c_a), veh/h	483	0	519	497	0	0	488	1294	1354	430	2521	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.75	0.75	0.75	0.52	0.52	0.52
Uniform Delay (d), s/veh	30.9	0.0	28.2	29.6	0.0	0.0	5.7	0.0	0.0	5.3	8.0	5.3
Incr Delay (d2), s/veh	0.7	0.0	1.6	0.1	0.0	0.0	0.3	0.9	0.8	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	0.0	4.5	0.6	0.0	0.0	0.5	0.6	0.6	0.0	8.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	0.0	29.8	29.7	0.0	0.0	5.9	0.9	0.9	5.3	8.4	5.4
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		231			22			1304			1448	
Approach Delay, s/veh		30.4			29.7			1.2			8.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		61.2		13.8	9.2	52.1		13.8				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		45.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s		2.1		8.2	3.1	16.9		2.8				
Green Ext Time (p_c), s		5.2		0.6	0.1	5.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			7.1									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	20	515	9	5	550
Future Vol, veh/h	31	20	515	9	5	550
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	5	0	0	6
Mvmt Flow	37	24	620	11	6	663

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1301	626	0	0	631	0
Stage 1	626	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	320	561	-	-	961	-
Stage 1	709	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	317	561	-	-	961	-
Mov Cap-2 Maneuver	317	-	-	-	-	-
Stage 1	709	-	-	-	-	-
Stage 2	681	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	382	961	-
HCM Lane V/C Ratio	-	-	0.161	0.006	-
HCM Control Delay (s)	-	-	16.2	8.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	919	19	187	907	25	124
Future Vol, veh/h	919	19	187	907	25	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	7	6	4	0	7
Mvmt Flow	978	20	199	965	27	132

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	998	0	2351	988
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	1363	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	678	-	68	327
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	325	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	678	-	48	327
Mov Cap-2 Maneuver	-	-	-	-	158	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	229	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	34
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	277	-	-	678	-
HCM Lane V/C Ratio	0.572	-	-	0.293	-
HCM Control Delay (s)	34	-	-	12.5	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	3.3	-	-	1.2	-

Intersection	
Int Delay, s/veh	36.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	83	140	207	164	6	177	9	245	3	4	3
Future Vol, veh/h	0	83	140	207	164	6	177	9	245	3	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	93	157	233	184	7	199	10	275	3	4	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	191	0	0	250	0	0	829	829	172	968	904	188
Stage 1	-	-	-	-	-	-	172	172	-	654	654	-
Stage 2	-	-	-	-	-	-	657	657	-	314	250	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1395	-	-	1287	-	-	346	371	878	262	281	868
Stage 1	-	-	-	-	-	-	857	790	-	494	462	-
Stage 2	-	-	-	-	-	-	521	538	-	726	678	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1395	-	-	1287	-	-	286	296	878	148	224	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	286	296	-	148	224	-
Stage 1	-	-	-	-	-	-	857	790	-	494	368	-
Stage 2	-	-	-	-	-	-	409	429	-	492	678	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.6	83.7	20.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	464	1395	-	-	1287	-	-	240
HCM Lane V/C Ratio	1.044	-	-	-	0.181	-	-	0.047
HCM Control Delay (s)	83.7	0	-	-	8.4	0	-	20.7
HCM Lane LOS	F	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	14.8	0	-	-	0.7	-	-	0.1

Intersection	
Int Delay, s/veh	34.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	0	48	0	0	17	17	1572	2	3	1673	71
Future Vol, veh/h	68	0	48	0	0	17	17	1572	2	3	1673	71
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	22	0	12	0	0	31	17	6	50	100	4	34
Mvmt Flow	75	0	53	0	0	19	19	1727	2	3	1838	78

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2785	3650	958	2691	3688	865	1916	0	0	1729	0	0
Stage 1	1883	1883	-	1766	1766	-	-	-	-	-	-	-
Stage 2	902	1767	-	925	1922	-	-	-	-	-	-	-
Critical Hdwy	8.34	6.9	7.34	7.5	6.5	7.52	4.44	-	-	6.1	-	-
Critical Hdwy Stg 1	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.72	4	3.42	3.5	4	3.61	2.37	-	-	3.2	-	-
Pot Cap-1 Maneuver	~ 20	0	*392	*103	0	*410	520	-	-	*463	-	-
Stage 1	~ 47	98	-	*89	138	-	-	-	-	-	-	-
Stage 2	237	114	-	*294	116	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	~ 19	0	*392	*86	0	*410	520	-	-	*463	-	-
Mov Cap-2 Maneuver	~ 19	0	-	*86	0	-	-	-	-	-	-	-
Stage 1	~ 45	97	-	*86	133	-	-	-	-	-	-	-
Stage 2	218	110	-	*253	115	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1021.9	14.2	0.1	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	520	-	-	19	392	410	* 463	-	-
HCM Lane V/C Ratio	0.036	-	-	3.933	0.135	0.046	0.007	-	-
HCM Control Delay (s)	12.2	-	-	$ 1732.3	15.6	14.2	12.8	-	-
HCM Lane LOS	B	-	-	F	C	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	9.8	0.5	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	2	6	0	0	0	13	367	29	32	336	16
Future Vol, veh/h	25	2	6	0	0	0	13	367	29	32	336	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	7	18	5	0
Mvmt Flow	29	2	7	0	0	0	15	427	34	37	391	19

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	949	966	401			410	0	0	461	0	0
Stage 1	475	475	-			-	-	-	-	-	-
Stage 2	474	491	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.1	-	-	4.28	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.362	-	-
Pot Cap-1 Maneuver	291	257	653			1160	-	-	1021	-	-
Stage 1	630	561	-			-	-	-	-	-	-
Stage 2	630	552	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	273	0	653			1160	-	-	1021	-	-
Mov Cap-2 Maneuver	273	0	-			-	-	-	-	-	-
Stage 1	619	0	-			-	-	-	-	-	-
Stage 2	600	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.6	0.3	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1160	-	-	273	653	1021	-	-
HCM Lane V/C Ratio	0.013	-	-	0.106	0.014	0.036	-	-
HCM Control Delay (s)	8.1	0	-	19.8	10.6	8.7	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	39	392	0	0	351
Future Vol, veh/h	33	39	392	0	0	351
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	18	6	0	0	7
Mvmt Flow	38	44	445	0	0	399

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	844	445	0	0	445	0
Stage 1	445	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6	6.18	-	-	4.1	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	-	-	2.2	-
Pot Cap-1 Maneuver	369	595	-	-	1126	-
Stage 1	683	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	369	595	-	-	1126	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	713	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	465	1126	-
HCM Lane V/C Ratio	-	-	0.176	-	-
HCM Control Delay (s)	-	-	14.4	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	307	25	26	337	41	24
Future Vol, veh/h	307	25	26	337	41	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	8	5	0	4	0	0
Mvmt Flow	345	28	29	379	46	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	373	0	796	359
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	437	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1197	-	301	663
Stage 1	-	-	-	-	657	-
Stage 2	-	-	-	-	595	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1197	-	292	663
Mov Cap-2 Maneuver	-	-	-	-	292	-
Stage 1	-	-	-	-	657	-
Stage 2	-	-	-	-	577	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	17.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	368	-	-	1197	-
HCM Lane V/C Ratio	0.198	-	-	0.024	-
HCM Control Delay (s)	17.2	-	-	8.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	305	26	18	311	52	58
Future Vol, veh/h	305	26	18	311	52	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	7	4	31	5	13	4
Mvmt Flow	347	30	20	353	59	66

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	377	0	755	362
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	393	-
Critical Hdwy	-	-	4.41	-	5.33	5.64
Critical Hdwy Stg 1	-	-	-	-	4.33	-
Critical Hdwy Stg 2	-	-	-	-	4.33	-
Follow-up Hdwy	-	-	2.479	-	3.617	3.336
Pot Cap-1 Maneuver	-	-	1039	-	464	720
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	751	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1039	-	453	720
Mov Cap-2 Maneuver	-	-	-	-	453	-
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	733	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	563	-	-	1039	-
HCM Lane V/C Ratio	0.222	-	-	0.02	-
HCM Control Delay (s)	13.2	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	229	530	50	141	556	142	136	230	65	174	218	175
Future Volume (vph)	229	530	50	141	556	142	136	230	65	174	218	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98		0.99		1.00	0.99	
Frt			0.850			0.850		0.967			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	1749	1432	1752	1727	1442	1901	1744	0	1684	1760	0
Flt Permitted	0.117			0.117			0.129			0.284		
Satd. Flow (perm)	205	1749	1432	216	1727	1406	258	1744	0	502	1760	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			173		12			34	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	5%	5%	9%	3%	10%	12%	6%	5%	11%	13%	6%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	279	646	61	172	678	173	166	359	0	212	479	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.2	35.3	49.0	43.2	35.3	43.2	39.6	30.9		40.2	31.1	
Actuated g/C Ratio	0.39	0.32	0.44	0.39	0.32	0.39	0.36	0.28		0.36	0.28	

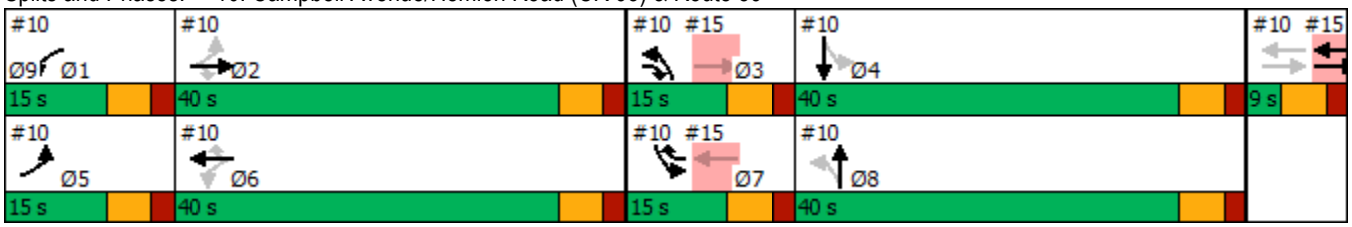
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.40	1.16	0.09	0.82	1.23	0.26	0.75	0.73		0.76	0.92	
Control Delay	234.1	125.3	0.2	54.5	153.3	4.4	43.9	44.7		43.7	61.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	234.1	125.3	0.2	54.5	153.3	4.4	43.9	44.7		43.7	61.0	
LOS	F	F	A	D	F	A	D	D		D	E	
Approach Delay		148.4			111.5			44.4			55.6	
Approach LOS		F			F			D			E	
Queue Length 50th (ft)	~218	~553	0	73	~606	0	70	212		93	296	
Queue Length 95th (ft)	#373	#713	0	#177	#768	31	#136	308		#161	#446	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	199	557	714	210	550	657	227	546		278	567	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.40	1.16	0.09	0.82	1.23	0.26	0.73	0.66		0.76	0.84	

Intersection Summary

Area Type: Other
Cycle Length: 119
Actuated Cycle Length: 110.6
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.40
Intersection Signal Delay: 99.9 Intersection LOS: F
Intersection Capacity Utilization 91.7% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	520	364	20	91	283	501	50	616	124	501	484	573
Future Volume (vph)	520	364	20	91	283	501	50	616	124	501	484	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1758	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1409
Flt Permitted	0.135			0.525			0.100			0.140		
Satd. Flow (perm)	250	1724	1168	1001	1761	1299	164	3343	0	244	1627	1409
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				358
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	531	371	20	93	289	511	51	756	0	511	494	585
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.7	51.5	69.9	33.4	30.2	54.7	63.8	40.2		70.3	46.3	76.4
Actuated g/C Ratio	0.39	0.34	0.46	0.22	0.20	0.36	0.42	0.26		0.46	0.30	0.50
v/c Ratio	1.34	0.64	0.03	0.35	0.83	1.10	0.18	0.85		1.31	1.00	0.66
Control Delay	207.5	45.1	0.1	37.8	69.8	99.7	41.4	63.5		198.3	92.7	8.6

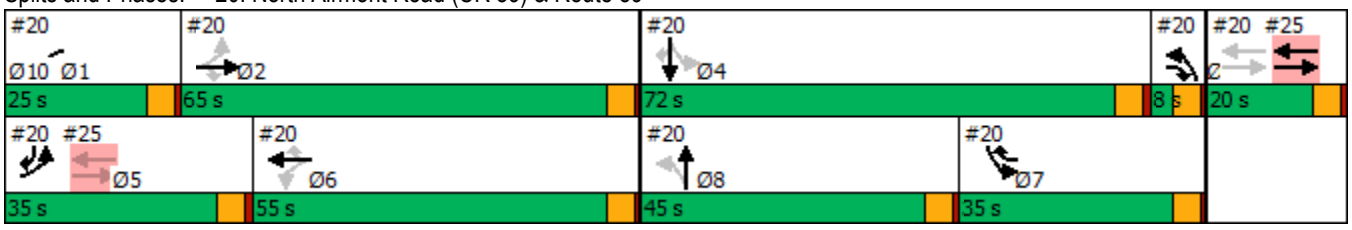
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.1	0.0
Total Delay	207.5	45.1	0.1	37.8	69.8	99.7	41.4	63.5		198.3	92.8	8.6
LOS	F	D	A	D	E	F	D	E		F	F	A
Approach Delay		137.7			83.6			62.1			95.7	
Approach LOS		F			F			E			F	
Queue Length 50th (ft)	~603	303	0	54	274	258	25	364		~566	~553	66
Queue Length 95th (ft)	#976	350	0	112	263	#789	#82	#545		#908	612	110
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	395	744	588	399	644	465	287	888		391	717	884
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	14	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.34	0.50	0.03	0.23	0.45	1.10	0.18	0.85		1.31	0.70	0.66

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 152.5
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 95.9 Intersection LOS: F
Intersection Capacity Utilization 109.1% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

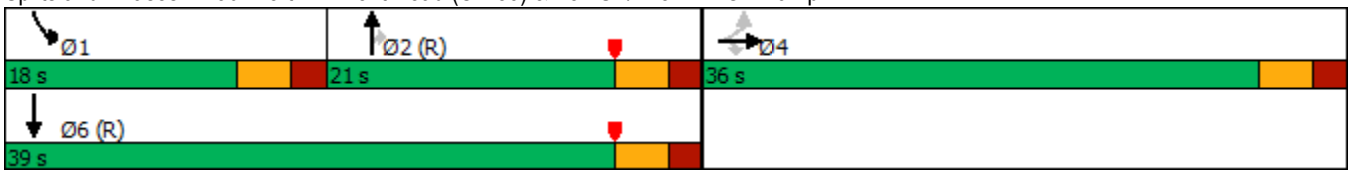
HCM 6th Edition methodology does not support clustered intersections.

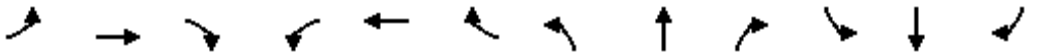
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	382	6	519	0	0	0	0	924	780	439	1035	0
Future Volume (vph)	382	6	519	0	0	0	0	924	780	439	1035	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						411			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	5%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	392	524	0	0	0	0	933	788	443	1045	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		27.9	27.9					19.8	19.8	12.3	37.1	
Actuated g/C Ratio		0.37	0.37					0.26	0.26	0.16	0.49	
v/c Ratio		0.67	0.92					1.16	1.08	0.77	0.61	
Control Delay		25.6	41.4					111.3	69.3	32.3	11.1	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		25.6	41.4					111.3	69.3	32.3	11.1	
LOS		C	D					F	E	C	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		34.6						92.1			17.4	
Approach LOS		C						F			B	
Queue Length 50th (ft)		138	175					~320	~284	84	151	
Queue Length 95th (ft)		228	#363					#422	#471	m104	m211	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					801	729	609	1724	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.61	0.85					1.16	1.08	0.73	0.61	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 52.4		Intersection LOS: D	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





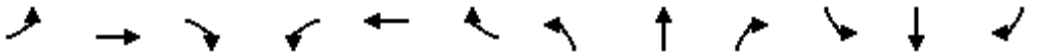
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	6	519	0	0	0	0	924	780	439	1035	0
Future Volume (veh/h)	382	6	519	0	0	0	0	924	780	439	1035	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1844	2067	2007	0
Adj Flow Rate, veh/h	386	6	524				0	933	0	443	1045	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	5	2	6	0
Cap, veh/h	605	9	531				0	760		553	1728	0
Arrive On Green	0.41	0.41	0.41				0.00	0.48	0.00	0.10	0.30	0.00
Sat Flow, veh/h	1464	23	1284				0	3226	1563	3818	3913	0
Grp Volume(v), veh/h	392	0	524				0	933	0	443	1045	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1563	1909	1906	0
Q Serve(g_s), s	15.8	0.0	30.3				0.0	18.1	0.0	8.5	17.5	0.0
Cycle Q Clear(g_c), s	15.8	0.0	30.3				0.0	18.1	0.0	8.5	17.5	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	615	0	531				0	760		553	1728	0
V/C Ratio(X)	0.64	0.00	0.99				0.00	1.23		0.80	0.60	0.00
Avail Cap(c_a), veh/h	615	0	531				0	760		662	1728	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.34	0.34	0.00
Uniform Delay (d), s/veh	17.5	0.0	21.8				0.0	19.4	0.0	32.8	20.4	0.0
Incr Delay (d2), s/veh	1.7	0.0	35.5				0.0	113.8	0.0	1.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	0.0	19.5				0.0	25.0	0.0	6.1	10.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	0.0	57.3				0.0	133.1	0.0	34.5	20.9	0.0
LnGrp LOS	B	A	E				A	F		C	C	A
Approach Vol, veh/h		916						933			1488	
Approach Delay, s/veh		41.0						133.1			25.0	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.9	23.1		36.0		39.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.5	0.0		32.3		0.0
Green Ext Time (p_c), s	0.3	0.0		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.6
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

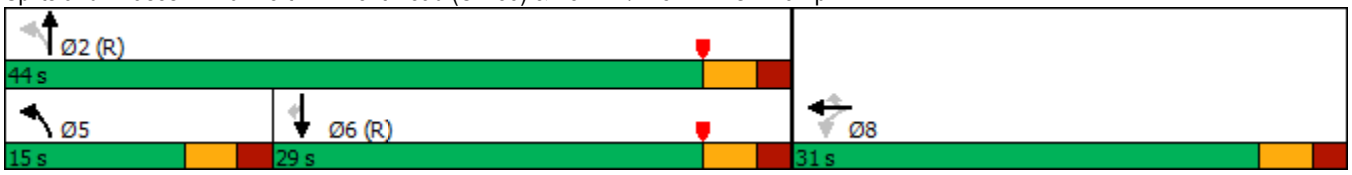


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	692	1	383	361	946	0	0	782	326
Future Volume (vph)	0	0	0	692	1	383	361	946	0	0	782	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1588	1591	1553	1344	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.133					
Satd. Flow (perm)	0	0	0	1588	1591	1553	188	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						369
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	8%	0%	4%	24%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	474	475	525	495	1296	0	0	1071	447
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.9	24.9	24.9	40.1	40.1			25.1	25.1
Actuated g/C Ratio				0.33	0.33	0.33	0.53	0.53			0.33	0.33
v/c Ratio				0.90	0.90	0.90	1.95	0.81			0.88	0.60
Control Delay				46.3	46.4	39.9	454.8	18.1			31.4	7.4
Queue Delay				0.0	0.0	0.0	0.0	0.0			7.9	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				46.3	46.4	39.9	454.8	18.1			39.3	8.0
LOS				D	D	D	F	B			D	A
Approach Delay					44.0			138.8			30.1	
Approach LOS					D			F			C	
Queue Length 50th (ft)				212	212	185	~342	315			262	73
Queue Length 95th (ft)				248	248	217	m#331	m248			148	0
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				550	551	605	254	1593			1213	747
Starvation Cap Reductn				0	0	0	0	0			121	92
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.86	0.86	0.87	1.95	0.81			0.98	0.68

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.95			
Intersection Signal Delay: 75.1		Intersection LOS: E	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	0	36	18	0	22	40	1585	12	24	1504	5
Future Volume (vph)	71	0	36	18	0	22	40	1585	12	24	1504	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.926			0.999			0.999	
Flt Protected		0.968			0.978		0.950			0.950		
Satd. Flow (prot)	0	1723	0	0	1671	0	1574	3290	0	1718	3291	0
Flt Permitted		0.773			0.877		0.081			0.085		
Satd. Flow (perm)	0	1376	0	0	1499	0	134	3290	0	154	3291	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		5.0			12.6			4.2			9.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	6%	0%	0%	8%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	119	0	0	44	0	44	1774	0	27	1677	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.9			11.9		56.3	53.1		55.5	50.3	
Actuated g/C Ratio		0.16			0.16		0.75	0.71		0.74	0.67	
v/c Ratio		0.43			0.15		0.15	0.76		0.08	0.76	
Control Delay		17.5			4.1		4.6	15.8		4.1	14.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		17.5			4.1		4.6	15.8		4.1	14.1	
LOS		B			A		A	B		A	B	
Approach Delay		17.5			4.1			15.5			13.9	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		19			0		4	180		2	237	
Queue Length 95th (ft)		61			13		14	#635		m7	#563	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		420			453		312	2329		344	2206	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.28			0.10		0.14	0.76		0.08	0.76	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 14.7 Intersection LOS: B

Intersection Capacity Utilization 60.2% ICU Level of Service B

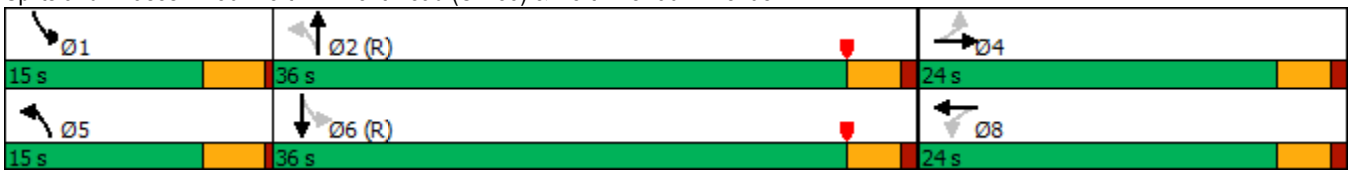
Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	0	36	18	0	22	40	1585	12	24	1504	5
Future Volume (veh/h)	71	0	36	18	0	22	40	1585	12	24	1504	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1811	1900	2057	1937	1682
Adj Flow Rate, veh/h	79	0	40	20	0	24	44	1761	13	27	1671	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	6	0	0	8	25
Cap, veh/h	200	16	69	146	25	121	362	2289	17	298	2374	9
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.65	0.65	0.08	0.84	0.84
Sat Flow, veh/h	930	125	534	592	192	941	1711	3501	26	1959	3762	14
Grp Volume(v), veh/h	119	0	0	44	0	0	44	865	909	27	817	860
Grp Sat Flow(s),veh/h/ln	1590	0	0	1726	0	0	1711	1721	1806	1959	1840	1935
Q Serve(g_s), s	3.5	0.0	0.0	0.0	0.0	0.0	0.6	26.2	26.3	0.3	13.1	13.1
Cycle Q Clear(g_c), s	5.1	0.0	0.0	1.6	0.0	0.0	0.6	26.2	26.3	0.3	13.1	13.1
Prop In Lane	0.66		0.34	0.45		0.55	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	285	0	0	292	0	0	362	1125	1181	298	1161	1221
V/C Ratio(X)	0.42	0.00	0.00	0.15	0.00	0.00	0.12	0.77	0.77	0.09	0.70	0.70
Avail Cap(c_a), veh/h	495	0	0	507	0	0	476	1125	1181	473	1161	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	0.0	29.2	0.0	0.0	4.6	9.0	9.1	8.0	3.3	3.3
Incr Delay (d2), s/veh	3.5	0.0	0.0	0.9	0.0	0.0	0.5	5.1	4.9	0.5	3.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	0.0	0.0	1.4	0.0	0.0	0.3	14.0	14.6	0.3	5.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	0.0	0.0	30.0	0.0	0.0	5.1	14.1	13.9	8.4	6.9	6.7
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		119			44			1818			1704	
Approach Delay, s/veh		34.1			30.0			13.8			6.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	53.0		13.7	10.0	51.3		13.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	28.3		7.1	2.6	15.1		3.6				
Green Ext Time (p_c), s	0.1	3.6		1.0	0.1	15.8		0.3				

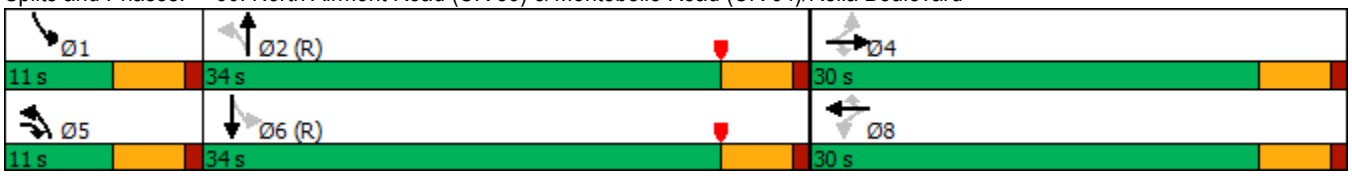
Intersection Summary												
HCM 6th Ctrl Delay			11.4									
HCM 6th LOS			B									

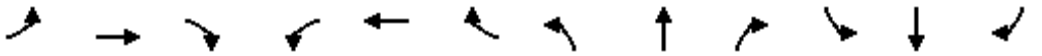
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	25	401	14	6	13	239	795	85	34	723	123
Future Volume (vph)	115	25	401	14	6	13	239	795	85	34	723	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.986			0.978	
Flt Protected		0.961		0.950			0.950			0.950		
Satd. Flow (prot)	0	1729	1433	1797	913	1242	1645	3232	0	1762	3432	0
Flt Permitted		0.760		0.624			0.160			0.293		
Satd. Flow (perm)	0	1367	1433	1180	913	1242	277	3232	0	543	3432	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			102		18			30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			10.2			11.1			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	156	446	16	7	14	266	977	0	38	940	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)		14.4	34.4	14.4	14.4	14.4	50.3	43.6		36.9	30.6	
Actuated g/C Ratio		0.19	0.46	0.19	0.19	0.19	0.67	0.58		0.49	0.41	
v/c Ratio		0.60	0.64	0.07	0.04	0.04	0.58	0.52		0.10	0.66	
Control Delay		36.4	17.8	23.1	22.5	0.2	19.4	7.5		6.8	20.5	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.4	17.8	23.1	22.5	0.2	19.4	7.5		6.8	20.5	
LOS		D	B	C	C	A	B	A		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		22.7			14.3			10.1			20.0	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		67	127	6	3	0	60	79		5	176	
Queue Length 95th (ft)		114	217	20	12	0	#170	201		17	248	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		455	694	393	304	482	459	1884		372	1417	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.34	0.64	0.04	0.02	0.03	0.58	0.52		0.10	0.66	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard

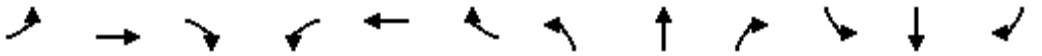




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	25	401	14	6	13	239	795	85	34	723	123
Future Volume (veh/h)	115	25	401	14	6	13	239	795	85	34	723	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	128	28	446	16	7	14	266	883	94	38	803	137
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	393	76	555	320	200	470	355	1343	143	398	1324	226
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.16	0.90	0.90	0.04	0.40	0.40
Sat Flow, veh/h	970	241	1405	1051	635	1492	1717	2994	319	1919	3270	558
Grp Volume(v), veh/h	156	0	446	16	7	14	266	484	493	38	470	470
Grp Sat Flow(s),veh/h/ln	1211	0	1405	1051	635	1492	1717	1642	1671	1919	1914	1914
Q Serve(g_s), s	7.0	0.0	21.1	0.9	0.6	0.5	6.0	5.6	5.6	0.8	14.5	14.5
Cycle Q Clear(g_c), s	7.6	0.0	21.1	8.5	0.6	0.5	6.0	5.6	5.6	0.8	14.5	14.5
Prop In Lane	0.82		1.00	1.00		1.00	1.00		0.19	1.00		0.29
Lane Grp Cap(c), veh/h	469	0	555	320	200	470	355	736	749	398	775	775
V/C Ratio(X)	0.33	0.00	0.80	0.05	0.03	0.03	0.75	0.66	0.66	0.10	0.61	0.61
Avail Cap(c_a), veh/h	491	0	581	340	212	497	355	736	749	482	775	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	20.1	23.5	17.8	17.8	16.2	2.4	2.4	12.0	17.6	17.6
Incr Delay (d2), s/veh	0.4	0.0	7.7	0.1	0.1	0.0	7.9	4.2	4.1	0.1	3.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	12.0	0.4	0.2	0.3	5.3	3.0	3.1	0.6	10.9	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	0.0	27.9	23.6	17.9	17.8	24.1	6.6	6.5	12.1	21.1	21.1
LnGrp LOS	C	A	C	C	B	B	C	A	A	B	C	C
Approach Vol, veh/h		602			37			1243			978	
Approach Delay, s/veh		26.0			20.3			10.3			20.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	38.6		28.6	11.0	35.4		28.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	7.6		23.1	8.0	16.5		10.5				
Green Ext Time (p_c), s	0.0	3.6		0.5	0.0	3.0		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		17.3	
HCM 6th LOS		B	

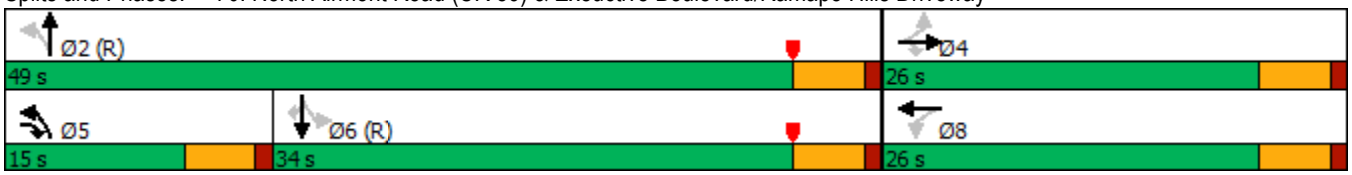


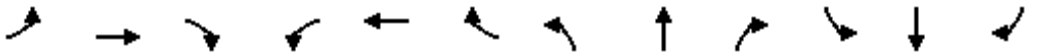
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	0	42	3	0	0	217	1090	22	1	1062	75
Future Volume (vph)	28	0	42	3	0	0	217	1090	22	1	1062	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		
Frt			0.850					0.997				0.850
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1589	1370	0	1805	0	1727	3333	0	1806	3492	1577
Flt Permitted							0.173			0.230		
Satd. Flow (perm)	0	1673	1370	0	1900	0	315	3333	0	437	3492	1577
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29					5				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	6%	0%	10%	0%	0%	0%	0%	7%	0%	0%	7%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	46	0	3	0	238	1222	0	1	1167	82
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	26.0	26.0	15.0	26.0	26.0		15.0	49.0		34.0	34.0	34.0
Total Split (%)	34.7%	34.7%	20.0%	34.7%	34.7%		20.0%	65.3%		45.3%	45.3%	45.3%
Maximum Green (s)	21.0	21.0	10.0	21.0	21.0		10.0	44.0		29.0	29.0	29.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		7.7	15.6		7.3		64.2	67.2		49.4	49.4	49.4
Actuated g/C Ratio		0.10	0.21		0.10		0.86	0.90		0.66	0.66	0.66
v/c Ratio		0.18	0.15		0.02		0.53	0.41		0.00	0.51	0.08
Control Delay		32.3	10.2		29.0		9.6	1.8		18.0	14.0	5.9
Queue Delay		0.0	0.0		0.0		0.3	0.0		0.0	1.2	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		32.3	10.2		29.0		9.9	1.9		18.0	15.2	5.9
LOS		C	B		C		A	A		B	B	A
Approach Delay		19.1			29.0			3.2			14.6	
Approach LOS		B			C			A			B	
Queue Length 50th (ft)		14	7		1		20	0		0	128	2
Queue Length 95th (ft)		37	23		9		m52	m100		m1	320	m14
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		468	342		532		491	2987		288	2302	1074
Starvation Cap Reductn		0	0		0		39	264		0	0	0
Spillback Cap Reductn		0	6		0		0	0		0	848	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.07	0.14		0.01		0.53	0.45		0.00	0.80	0.08

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 44 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 8.8		Intersection LOS: A	
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	0	42	3	0	0	217	1090	22	1	1062	75
Future Volume (veh/h)	28	0	42	3	0	0	217	1090	22	1	1062	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1752	1900	1900	1900	1876	1773	1876	2175	2070	2085
Adj Flow Rate, veh/h	31	0	46	3	0	0	238	1198	24	1	1167	82
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	0	10	0	0	0	0	7	0	0	7	6
Cap, veh/h	174	0	183	181	0	0	480	2744	55	455	2663	1196
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.00	0.14	1.00	1.00	0.68	0.68	0.68
Sat Flow, veh/h	1451	0	1485	1579	0	0	1787	3377	68	531	3933	1766
Grp Volume(v), veh/h	31	0	46	3	0	0	238	597	625	1	1167	82
Grp Sat Flow(s),veh/h/ln	1451	0	1485	1579	0	0	1787	1684	1760	531	1967	1766
Q Serve(g_s), s	1.4	0.0	2.1	0.0	0.0	0.0	2.9	0.0	0.0	0.0	10.2	1.2
Cycle Q Clear(g_c), s	1.5	0.0	2.1	0.1	0.0	0.0	2.9	0.0	0.0	0.0	10.2	1.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	174	0	183	181	0	0	480	1368	1431	455	2663	1196
V/C Ratio(X)	0.18	0.00	0.25	0.02	0.00	0.00	0.50	0.44	0.44	0.00	0.44	0.07
Avail Cap(c_a), veh/h	500	0	518	507	0	0	595	1368	1431	455	2663	1196
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.43	0.43	0.43	0.71	0.71	0.71
Uniform Delay (d), s/veh	34.3	0.0	29.8	33.6	0.0	0.0	3.8	0.0	0.0	3.9	5.6	4.1
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.0	0.0	0.0	0.3	0.4	0.4	0.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	1.4	0.1	0.0	0.0	0.9	0.3	0.3	0.0	5.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	30.5	33.6	0.0	0.0	4.1	0.4	0.4	3.9	5.9	4.2
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		77			3			1460			1250	
Approach Delay, s/veh		32.2			33.6			1.0			5.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		65.9		9.1	10.2	55.8		9.1				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		44.0		21.0	10.0	29.0		21.0				
Max Q Clear Time (g_c+I1), s		2.0		4.1	4.9	12.2		2.1				
Green Ext Time (p_c), s		5.2		0.2	0.3	5.3		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.1									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	11	517	18	10	600
Future Vol, veh/h	8	11	517	18	10	600
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	10	0	0	8
Mvmt Flow	13	17	821	29	16	952

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1820	836	0	0	850	0
Stage 1	836	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	194	446	-	-	797	-
Stage 1	622	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	186	446	-	-	797	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	622	-	-	-	-	-
Stage 2	542	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.3	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	281	797	-
HCM Lane V/C Ratio	-	-	0.107	0.02	-
HCM Control Delay (s)	-	-	19.3	9.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	747	22	83	823	17	157
Future Vol, veh/h	747	22	83	823	17	157
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	6	11	8	17	3
Mvmt Flow	778	23	86	857	18	164

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	801	0	1819	790
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	1029	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	784	-	117	424
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	406	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	784	-	104	424
Mov Cap-2 Maneuver	-	-	-	-	238	-
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	361	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	21.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	394	-	-	784	-
HCM Lane V/C Ratio	0.46	-	-	0.11	-
HCM Control Delay (s)	21.7	-	-	10.2	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	2.3	-	-	0.4	-

Intersection	
Int Delay, s/veh	108

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	152	231	315	78	2	96	1	199	2	1	0
Future Vol, veh/h	0	152	231	315	78	2	96	1	199	2	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	211	321	438	108	3	133	1	276	3	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	111	0	0	532	0	0	1358	1359	372	1496	1518	110
Stage 1	-	-	-	-	-	-	372	372	-	986	986	-
Stage 2	-	-	-	-	-	-	986	987	-	510	532	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1492	-	-	1006	-	-	162	203	680	121	142	955
Stage 1	-	-	-	-	-	-	683	676	-	336	366	-
Stage 2	-	-	-	-	-	-	356	409	-	582	561	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1492	-	-	1006	-	-	~ 102	109	680	45	76	955
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 102	109	-	45	76	-
Stage 1	-	-	-	-	-	-	683	676	-	336	196	-
Stage 2	-	-	-	-	-	-	189	219	-	345	561	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9	$ 380.1	80.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	238	1492	-	-	1006	-	-	52
HCM Lane V/C Ratio	1.727	-	-	-	0.435	-	-	0.08
HCM Control Delay (s)	$ 380.1	0	-	-	11.3	0	-	80.2
HCM Lane LOS	F	A	-	-	B	A	-	F
HCM 95th %tile Q(veh)	27.3	0	-	-	2.2	-	-	0.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	20	0	0	12	22	1654	2	5	1513	35
Future Vol, veh/h	39	0	20	0	0	12	22	1654	2	5	1513	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	67	0	40	0	0	88	33	7	50	25	7	50
Mvmt Flow	41	0	21	0	0	13	23	1741	2	5	1593	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2539	3411	815	2595	3428	872	1630	0	0	1743	0	0
Stage 1	1622	1622	-	1788	1788	-	-	-	-	-	-	-
Stage 2	917	1789	-	807	1640	-	-	-	-	-	-	-
Critical Hdwy	9.24	6.9	7.9	7.5	6.5	8.66	4.76	-	-	4.6	-	-
Critical Hdwy Stg 1	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.17	4	3.7	3.5	4	4.18	2.53	-	-	2.45	-	-
Pot Cap-1 Maneuver	*86	0	*400	*103	0	*321	*585	-	-	*548	-	-
Stage 1	*47	136	-	*86	135	-	-	-	-	-	-	-
Stage 2	*172	110	-	*346	160	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*80	0	*400	*94	0	*321	*585	-	-	*548	-	-
Mov Cap-2 Maneuver	*80	0	-	*94	0	-	-	-	-	-	-	-
Stage 1	*45	135	-	*83	130	-	-	-	-	-	-	-
Stage 2	*159	106	-	*325	159	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	64.5	16.7	0.1	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 585	-	-	80	400	321	* 548	-	-
HCM Lane V/C Ratio	0.04	-	-	0.513	0.053	0.039	0.01	-	-
HCM Control Delay (s)	11.4	-	-	90.1	14.5	16.7	11.6	-	-
HCM Lane LOS	B	-	-	F	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.2	0.2	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	2	11	0	0	0	12	264	60	53	515	5
Future Vol, veh/h	11	2	11	0	0	0	12	264	60	53	515	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	10	4	17	35	13	0
Mvmt Flow	17	3	17	0	0	0	18	400	91	80	780	8

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	1426	1471	784			788	0	0	491	0	0
Stage 1	944	944	-			-	-	-	-	-	-
Stage 2	482	527	-			-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2			4.2	-	-	4.45	-	-
Critical Hdwy Stg 1	5.4	5.5	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.29	-	-	2.515	-	-
Pot Cap-1 Maneuver	151	128	396			797	-	-	922	-	-
Stage 1	381	344	-			-	-	-	-	-	-
Stage 2	625	532	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	124	0	396			797	-	-	922	-	-
Mov Cap-2 Maneuver	124	0	-			-	-	-	-	-	-
Stage 1	369	0	-			-	-	-	-	-	-
Stage 2	528	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.6	0.3	0.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	797	-	-	124	396	922	-	-
HCM Lane V/C Ratio	0.023	-	-	0.134	0.05	0.087	-	-
HCM Control Delay (s)	9.6	0	-	38.5	14.6	9.3	0	-
HCM Lane LOS	A	A	-	E	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.2	0.3	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	22	275	0	0	547
Future Vol, veh/h	26	22	275	0	0	547
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	70	47	6	0	0	10
Mvmt Flow	35	29	367	0	0	729

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1096	367	0	0	367	0
Stage 1	367	-	-	-	-	-
Stage 2	729	-	-	-	-	-
Critical Hdwy	6.7	6.47	-	-	4.1	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	4.13	3.723	-	-	2.2	-
Pot Cap-1 Maneuver	199	601	-	-	1203	-
Stage 1	597	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	199	601	-	-	1203	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	406	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	287	1203	-
HCM Lane V/C Ratio	-	-	0.223	-	-
HCM Control Delay (s)	-	-	21.1	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	331	23	9	349	46	50
Future Vol, veh/h	331	23	9	349	46	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	9	15	50	14	5	16
Mvmt Flow	487	34	13	513	68	74

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	521	0	1043	504
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	539	-
Critical Hdwy	-	-	4.6	-	7.25	6.76
Critical Hdwy Stg 1	-	-	-	-	6.25	-
Critical Hdwy Stg 2	-	-	-	-	6.25	-
Follow-up Hdwy	-	-	2.65	-	3.545	3.444
Pot Cap-1 Maneuver	-	-	841	-	199	511
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	513	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	841	-	195	511
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	502	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	28.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	288	-	-	841	-
HCM Lane V/C Ratio	0.49	-	-	0.016	-
HCM Control Delay (s)	28.9	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.5	-	-	0	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	305	75	73	316	42	39
Future Vol, veh/h	305	75	73	316	42	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	18	5	18	16	21
Mvmt Flow	355	87	85	367	49	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	442	0	936	399
Stage 1	-	-	-	-	399	-
Stage 2	-	-	-	-	537	-
Critical Hdwy	-	-	4.15	-	5.36	5.81
Critical Hdwy Stg 1	-	-	-	-	4.36	-
Critical Hdwy Stg 2	-	-	-	-	4.36	-
Follow-up Hdwy	-	-	2.245	-	3.644	3.489
Pot Cap-1 Maneuver	-	-	1102	-	379	653
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	668	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1102	-	342	653
Mov Cap-2 Maneuver	-	-	-	-	342	-
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	603	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	444	-	-	1102	-
HCM Lane V/C Ratio	0.212	-	-	0.077	-
HCM Control Delay (s)	15.3	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	20	48	480	590	26
Future Vol, veh/h	7	20	48	480	590	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	4	-	-	2	-2	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	0	55	27	7	7	0
Mvmt Flow	10	29	69	686	843	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1686	862	880	0	-	0
Stage 1	862	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Critical Hdwy	7.2	7.15	4.37	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.795	2.443	-	-	-
Pot Cap-1 Maneuver	72	261	673	-	-	-
Stage 1	344	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	65	261	673	-	-	-
Mov Cap-2 Maneuver	65	-	-	-	-	-
Stage 1	309	-	-	-	-	-
Stage 2	362	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38.3	1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	673	-	146	-	-
HCM Lane V/C Ratio	0.102	-	0.264	-	-
HCM Control Delay (s)	11	-	38.3	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	1	-	-

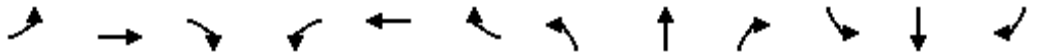
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	16	60	522	556	52
Future Vol, veh/h	13	16	60	522	556	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	9	9	0
Mvmt Flow	18	22	81	705	751	70

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1653	786	821	0	-	0
Stage 1	786	-	-	-	-	-
Stage 2	867	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	120	404	817	-	-	-
Stage 1	473	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	100	404	817	-	-	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	396	-	-	-	-	-
Stage 2	435	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	32.2	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	817	-	171	-	-
HCM Lane V/C Ratio	0.099	-	0.229	-	-
HCM Control Delay (s)	9.9	0	32.2	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.3	-	0.8	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	242	632	115	93	728	141	185	192	115	257	221	231
Future Volume (vph)	242	632	115	93	728	141	185	192	115	257	221	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.944			0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1631	1766	1516	1752	1810	1417	1919	1726	0	1762	1744	0
Flt Permitted	0.104			0.119			0.253			0.248		
Satd. Flow (perm)	179	1766	1516	220	1810	1417	511	1726	0	459	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		25			44	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	4%	3%	3%	5%	14%	5%	5%	4%	8%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	652	119	96	751	145	191	317	0	265	466	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.7	39.1	53.4	41.2	34.7	49.3	24.6	15.8		25.1	16.0	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.53	0.26	0.17		0.27	0.17	

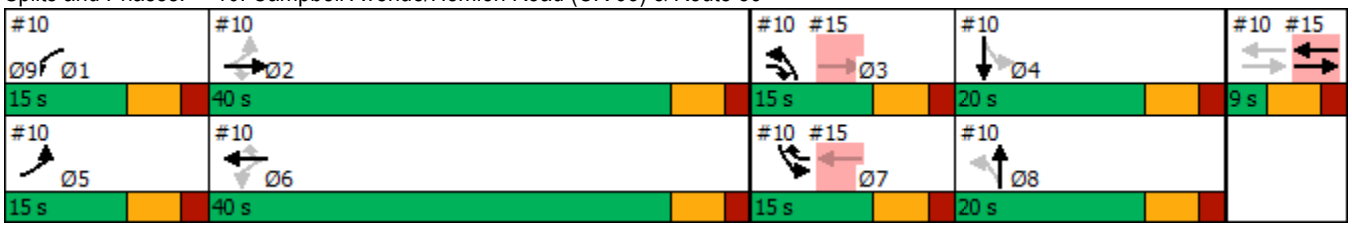
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.10	0.89	0.13	0.45	1.12	0.18	0.72	1.02		1.07	1.40	
Control Delay	114.1	43.3	1.3	20.5	103.1	2.4	41.1	93.3		106.4	225.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	114.1	43.3	1.3	20.5	103.1	2.4	41.1	93.3		106.4	225.2	
LOS	F	D	A	C	F	A	D	F		F	F	
Approach Delay		55.7			80.4			73.6			182.1	
Approach LOS		E			F			E			F	
Queue Length 50th (ft)	~113	345	0	25	~489	0	81	~193		~124	~354	
Queue Length 95th (ft)	#346	#736	13	71	#878	27	#167	#332		#292	#554	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	227	735	937	249	669	822	271	311		248	334	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.10	0.89	0.13	0.39	1.12	0.18	0.70	1.02		1.07	1.40	

Intersection Summary

Area Type: Other
Cycle Length: 99
Actuated Cycle Length: 93.8
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.40
Intersection Signal Delay: 94.5 Intersection LOS: F
Intersection Capacity Utilization 107.7% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	564	459	77	146	396	558	64	496	168	452	646	662
Future Volume (vph)	564	459	77	146	396	558	64	496	168	452	646	662
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99				
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1724	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1436
Flt Permitted	0.098			0.283			0.100			0.160		
Satd. Flow (perm)	178	1808	1424	544	1828	1398	171	3279	0	287	1739	1436
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					22				224
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	581	473	79	151	408	575	66	684	0	466	666	682
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	71.2	59.6	57.0	48.2	41.6	66.2	43.2	40.2		75.4	67.3	97.5
Actuated g/C Ratio	0.43	0.36	0.35	0.29	0.25	0.40	0.26	0.25		0.46	0.41	0.59

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

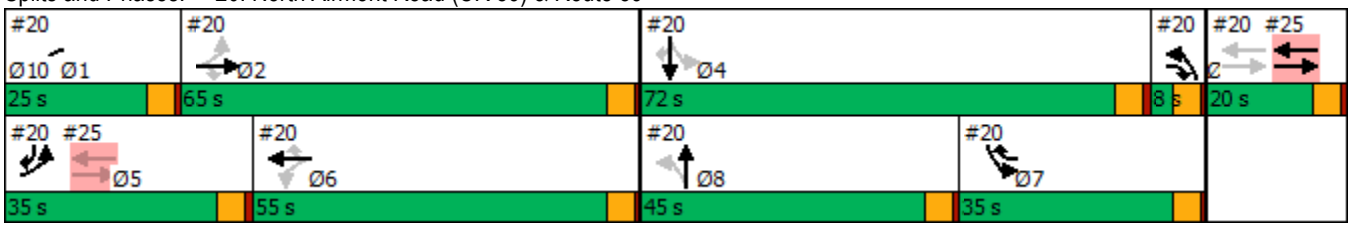
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.61	0.72	0.14	0.59	0.88	1.02	0.93	0.83		1.19	0.93	0.72
Control Delay	320.5	49.3	2.6	42.0	73.5	71.1	136.9	67.6		157.6	67.6	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	20.5	0.0
Total Delay	320.5	49.3	2.6	42.0	73.5	71.1	136.9	67.6		157.6	88.1	14.8
LOS	F	D	A	D	E	E	F	E		F	F	B
Approach Delay		185.1			68.1			73.7			78.4	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	~809	424	0	90	416	299	38	350		~494	658	254
Queue Length 95th (ft)	#1226	456	16	169	378	#691	#140	#532		#867	#1107	372
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	361	725	559	343	621	563	71	820		392	713	944
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	69	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.61	0.65	0.14	0.44	0.66	1.02	0.93	0.83		1.19	1.03	0.72

Intersection Summary			
Area Type:	Other		
Cycle Length: 190			
Actuated Cycle Length: 164			
Natural Cycle: 150			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.61			
Intersection Signal Delay: 100.3		Intersection LOS: F	
Intersection Capacity Utilization 119.6%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

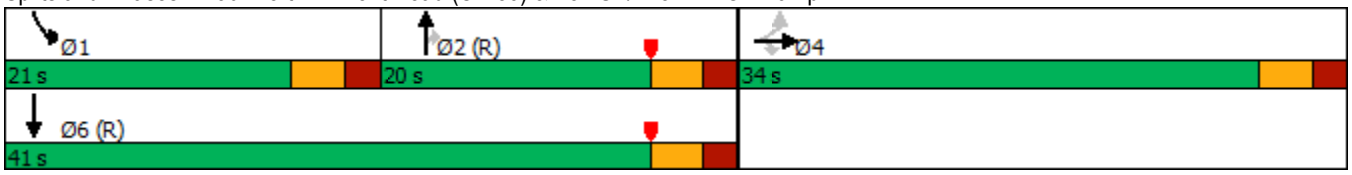
HCM 6th Edition methodology does not support clustered intersections.

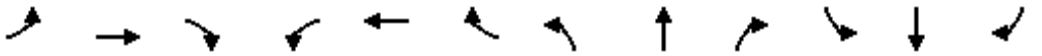
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	303	3	362	0	0	0	0	877	829	510	1412	0
Future Volume (vph)	303	3	362	0	0	0	0	877	829	510	1412	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1550	1445	0	0	0	0	3154	1616	3485	3524	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1550	1445	0	0	0	0	3154	1594	3482	3524	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						453			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	9%	0%	0%	0%	0%	9%	5%	3%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	309	366	0	0	0	0	886	837	515	1426	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		20.3	20.3					25.3	25.3	14.5	44.7	
Actuated g/C Ratio		0.27	0.27					0.34	0.34	0.19	0.60	
v/c Ratio		0.74	0.79					0.83	1.00	0.77	0.68	
Control Delay		34.9	29.8					28.6	38.0	28.3	6.0	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		34.9	29.8					28.6	38.0	28.3	6.2	
LOS		C	C					C	D	C	A	
Approach Delay		32.1						33.1			12.0	
Approach LOS		C						C			B	
Queue Length 50th (ft)		132	115					136	~71	84	2	
Queue Length 95th (ft)		181	179					m#374	m#442	m137	m260	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	621					1062	837	743	2101	
Starvation Cap Reductn		0	0					0	0	0	114	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.52	0.59					0.83	1.00	0.69	0.72	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 134.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	303	3	362	0	0	0	0	877	829	510	1412	0
Future Volume (veh/h)	303	3	362	0	0	0	0	877	829	510	1412	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1619				0	1714	1844	2052	2022	0
Adj Flow Rate, veh/h	306	3	366				0	886	0	515	1426	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	9				0	9	5	3	5	0
Cap, veh/h	492	5	408				0	1091		635	2187	0
Arrive On Green	0.30	0.30	0.30				0.00	0.67	0.00	0.11	0.38	0.00
Sat Flow, veh/h	1654	16	1372				0	3342	1563	3791	3942	0
Grp Volume(v), veh/h	309	0	366				0	886	0	515	1426	0
Grp Sat Flow(s),veh/h/ln	1670	0	1372				0	1628	1563	1895	1921	0
Q Serve(g_s), s	12.0	0.0	19.2				0.0	14.8	0.0	10.0	22.9	0.0
Cycle Q Clear(g_c), s	12.0	0.0	19.2				0.0	14.8	0.0	10.0	22.9	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	497	0	408				0	1091		635	2187	0
V/C Ratio(X)	0.62	0.00	0.90				0.00	0.81		0.81	0.65	0.00
Avail Cap(c_a), veh/h	646	0	531				0	1091		809	2187	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	22.7	0.0	25.2				0.0	10.7	0.0	32.1	17.1	0.0
Incr Delay (d2), s/veh	0.5	0.0	12.9				0.0	6.6	0.0	0.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	0.0	11.8				0.0	6.8	0.0	5.7	12.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	0.0	38.1				0.0	17.3	0.0	32.5	17.2	0.0
LnGrp LOS	C	A	D				A	B		C	B	A
Approach Vol, veh/h		675						886			1941	
Approach Delay, s/veh		31.3						17.3			21.3	
Approach LOS		C						B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.6	30.1		27.3		47.7
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	12.0	0.0		21.2		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

Intersection Summary		
HCM 6th Ctrl Delay		22.2
HCM 6th LOS		C

Notes

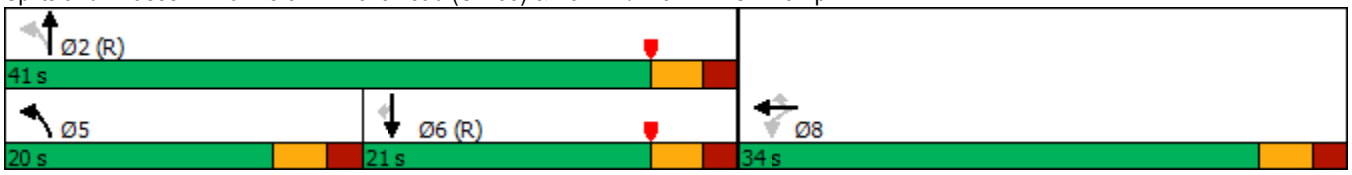
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	894	2	514	430	749	0	0	1027	505
Future Volume (vph)	0	0	0	894	2	514	430	749	0	0	1027	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1649	1654	1583	1462	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.163					
Satd. Flow (perm)	0	0	0	1649	1654	1583	251	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134						376
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	4%	3%	2%	14%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	456	458	524	439	764	0	0	1048	515
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				25.4	25.4	25.4	39.6	39.6			19.6	19.6
Actuated g/C Ratio				0.34	0.34	0.34	0.53	0.53			0.26	0.26
v/c Ratio				0.82	0.82	0.84	1.17	0.47			1.11	0.77
Control Delay				35.2	35.2	29.8	111.8	4.8			95.7	25.4
Queue Delay				0.4	0.4	1.0	0.0	0.0			0.2	1.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				35.5	35.6	30.8	111.8	4.8			95.9	26.5
LOS				D	D	C	F	A			F	C
Approach Delay					33.8			43.8			73.0	
Approach LOS					C			D			E	
Queue Length 50th (ft)				191	192	160	~211	48			~342	143
Queue Length 95th (ft)				296	298	#290	m#291	m21			#486	#305
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				637	639	694	374	1619			941	672
Starvation Cap Reductn				0	0	0	0	0			42	43
Spillback Cap Reductn				23	23	45	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.74	0.74	0.81	1.17	0.47			1.17	0.82

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay: 51.3		Intersection LOS: D	
Intersection Capacity Utilization 134.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	2	34	61	2	64	43	1504	72	70	1664	13
Future Volume (vph)	71	2	34	61	2	64	43	1504	72	70	1664	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.993			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1845	0	1589	3278	0	1718	3388	0
Flt Permitted		0.698			0.815		0.092			0.087		
Satd. Flow (perm)	0	1286	0	0	1539	0	154	3278	0	157	3388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			67			8			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		4.1			10.5			4.2			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	6%	0%	0%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	0	0	138	0	47	1713	0	76	1823	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		13.1			13.1		53.4	46.1		54.4	49.1	
Actuated g/C Ratio		0.17			0.17		0.71	0.61		0.73	0.65	
v/c Ratio		0.46			0.43		0.16	0.85		0.23	0.82	
Control Delay		26.3			18.7		5.2	22.8		9.5	17.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.3			18.7		5.2	22.8		9.5	17.5	
LOS		C			B		A	C		A	B	
Approach Delay		26.3			18.7			22.3			17.2	
Approach LOS		C			B			C			B	
Queue Length 50th (ft)		36			29		5	374		8	~204	
Queue Length 95th (ft)		78			73		16	#632		m29	#654	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		365			459		321	2019		343	2216	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.32			0.30		0.15	0.85		0.22	0.82	

Intersection Summary

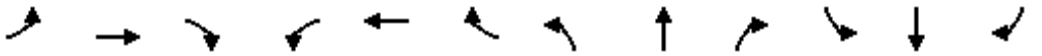
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 19.8 Intersection LOS: B
Intersection Capacity Utilization 73.6% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	2	34	61	2	64	43	1504	72	70	1664	13
Future Volume (veh/h)	71	2	34	61	2	64	43	1504	72	70	1664	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1811	1900	2057	1982	2057
Adj Flow Rate, veh/h	77	2	37	66	2	70	47	1635	78	76	1809	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	6	0	0	5	0
Cap, veh/h	210	21	71	162	20	115	341	2011	95	371	2391	18
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.14	0.83	0.83
Sat Flow, veh/h	983	155	533	687	153	865	1725	3344	159	1959	3830	30
Grp Volume(v), veh/h	116	0	0	138	0	0	47	837	876	76	888	935
Grp Sat Flow(s),veh/h/ln	1670	0	0	1706	0	0	1725	1721	1782	1959	1883	1977
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	0.7	28.4	28.9	0.9	16.1	16.2
Cycle Q Clear(g_c), s	4.4	0.0	0.0	5.3	0.0	0.0	0.7	28.4	28.9	0.9	16.1	16.2
Prop In Lane	0.66		0.32	0.48		0.51	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	301	0	0	297	0	0	341	1035	1072	371	1175	1234
V/C Ratio(X)	0.38	0.00	0.00	0.46	0.00	0.00	0.14	0.81	0.82	0.20	0.76	0.76
Avail Cap(c_a), veh/h	501	0	0	506	0	0	450	1035	1072	451	1175	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	0.0	30.5	0.0	0.0	5.6	11.6	11.7	10.2	3.8	3.8
Incr Delay (d2), s/veh	2.9	0.0	0.0	4.1	0.0	0.0	0.7	6.8	6.9	1.0	4.6	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	0.0	4.7	0.0	0.0	0.4	16.2	16.9	1.1	7.2	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	0.0	0.0	34.5	0.0	0.0	6.2	18.4	18.6	11.1	8.3	8.2
LnGrp LOS	C	A	A	C	A	A	A	B	B	B	A	A
Approach Vol, veh/h		116			138			1760			1899	
Approach Delay, s/veh		33.0			34.5			18.2			8.4	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	49.1		13.9	10.2	50.8		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.9	30.9		6.4	2.7	18.2		7.3				
Green Ext Time (p_c), s	0.3	1.1		1.0	0.1	13.2		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		14.4	
HCM 6th LOS		B	

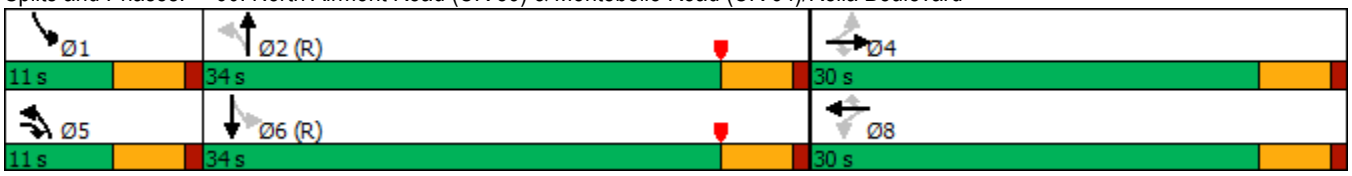


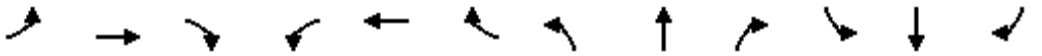
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	9	295	98	36	77	329	864	51	37	1031	138
Future Volume (vph)	164	9	295	98	36	77	329	864	51	37	1031	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.992			0.982	
Flt Protected		0.955		0.950			0.950			0.950		
Satd. Flow (prot)	0	1665	1433	1762	1723	1553	1710	3355	0	1745	3541	0
Flt Permitted		0.709		0.582			0.119			0.297		
Satd. Flow (perm)	0	1236	1433	1079	1723	1553	214	3355	0	546	3541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			102		9			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	182	311	103	38	81	346	963	0	39	1230	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		16.6	36.5	16.6	16.6	16.6	47.4	41.3		35.0	28.5	
Actuated g/C Ratio		0.22	0.49	0.22	0.22	0.22	0.63	0.55		0.47	0.38	
v/c Ratio		0.67	0.44	0.43	0.10	0.19	0.80	0.52		0.11	0.90	
Control Delay		38.0	13.9	29.4	21.4	4.3	38.2	14.1		7.7	32.4	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		38.0	13.9	29.4	21.4	4.3	38.2	14.1		7.7	32.4	
LOS		D	B	C	C	A	D	B		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		22.8			18.9			20.4			31.7	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)		78	81	42	14	0	105	136		6	269	
Queue Length 95th (ft)		127	144	76	33	21	#340	218		20	#400	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		412	711	359	574	585	432	1852		359	1383	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.44	0.44	0.29	0.07	0.14	0.80	0.52		0.11	0.89	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 25.0		Intersection LOS: C	
Intersection Capacity Utilization 79.8%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard

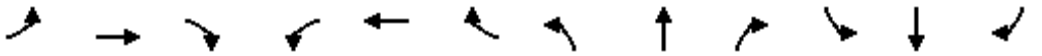




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	9	295	98	36	77	329	864	51	37	1031	138
Future Volume (veh/h)	164	9	295	98	36	77	329	864	51	37	1031	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	173	9	311	103	38	81	346	909	54	39	1085	145
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	359	14	446	533	486	430	348	1712	102	380	1664	222
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.08	0.53	0.53	0.04	0.48	0.48
Sat Flow, veh/h	1118	58	1405	1583	2046	1810	1773	3257	194	1904	3447	460
Grp Volume(v), veh/h	182	0	311	103	38	81	346	474	489	39	611	619
Grp Sat Flow(s),veh/h/ln	1177	0	1405	1583	2046	1810	1773	1698	1753	1904	1944	1963
Q Serve(g_s), s	9.9	0.0	14.6	0.0	1.1	2.7	6.0	13.8	13.8	0.8	17.8	17.9
Cycle Q Clear(g_c), s	11.0	0.0	14.6	3.1	1.1	2.7	6.0	13.8	13.8	0.8	17.8	17.9
Prop In Lane	0.95		1.00	1.00		1.00	1.00		0.11	1.00		0.23
Lane Grp Cap(c), veh/h	373	0	446	533	486	430	348	893	921	380	938	948
V/C Ratio(X)	0.49	0.00	0.70	0.19	0.08	0.19	0.99	0.53	0.53	0.10	0.65	0.65
Avail Cap(c_a), veh/h	493	0	581	685	682	603	348	893	921	462	938	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	22.4	23.0	22.2	22.8	18.4	11.7	11.7	9.6	14.6	14.7
Incr Delay (d2), s/veh	1.0	0.0	2.5	0.2	0.1	0.2	43.6	2.0	1.9	0.1	3.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	0.0	8.6	2.6	0.9	2.1	11.7	8.6	8.8	0.5	12.6	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	0.0	24.9	23.2	22.3	23.0	62.0	13.7	13.6	9.7	18.1	18.2
LnGrp LOS	C	A	C	C	C	C	E	B	B	A	B	B
Approach Vol, veh/h		493			222			1309			1269	
Approach Delay, s/veh		25.9			23.0			26.4			17.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	44.4		22.8	11.0	41.2		22.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	15.8		16.6	8.0	19.9		5.1				
Green Ext Time (p_c), s	0.0	3.1		1.2	0.0	3.5		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			22.8									
HCM 6th LOS			C									

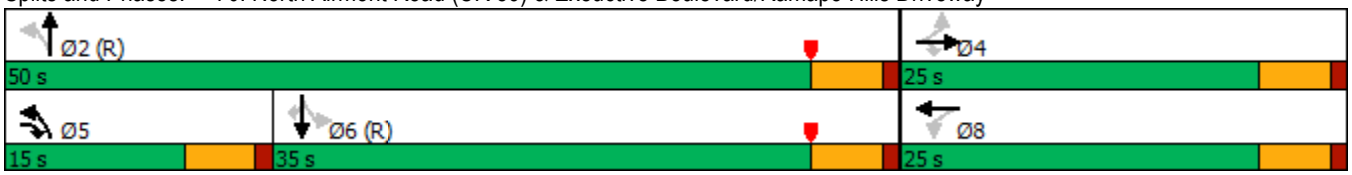


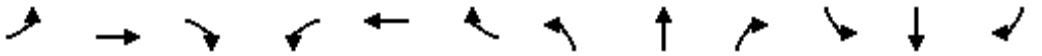
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	0	141	17	0	4	83	1159	20	5	1374	45
Future Volume (vph)	81	0	141	17	0	4	83	1159	20	5	1374	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor							1.00	1.00		1.00		0.98
Frt			0.850		0.975			0.997				0.850
Flt Protected		0.950			0.961		0.950			0.950		
Satd. Flow (prot)	0	1604	1507	0	1780	0	1661	3427	0	1806	3593	1623
Flt Permitted		0.743			0.736		0.099			0.228		
Satd. Flow (perm)	0	1255	1507	0	1363	0	173	3427	0	433	3593	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29		102			4				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%	4%	4%	0%	0%	4%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	147	0	22	0	86	1228	0	5	1431	47
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	50.0		35.0	35.0	35.0
Total Split (%)	33.3%	33.3%	20.0%	33.3%	33.3%		20.0%	66.7%		46.7%	46.7%	46.7%
Maximum Green (s)	20.0	20.0	10.0	20.0	20.0		10.0	45.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		10.6	20.5		10.6		56.6	57.6		44.5	44.5	44.5
Actuated g/C Ratio		0.14	0.27		0.14		0.75	0.77		0.59	0.59	0.59
v/c Ratio		0.47	0.34		0.08		0.32	0.47		0.02	0.67	0.05
Control Delay		37.5	17.1		0.6		9.8	7.0		4.2	7.2	0.3
Queue Delay		0.0	2.9		0.3		0.0	0.6		0.0	33.8	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.5	20.1		0.9		9.8	7.6		4.2	41.0	0.3
LOS		D	C		A		A	A		A	D	A
Approach Delay		26.4			0.9			7.7			39.6	
Approach LOS		C			A			A			D	
Queue Length 50th (ft)		37	41		0		13	117		0	31	0
Queue Length 95th (ft)		73	75		0		m37	200		m1	m378	m0
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		334	490		438		328	2632		256	2130	983
Starvation Cap Reductn		0	0		0		0	903		0	0	0
Spillback Cap Reductn		0	248		246		0	0		0	785	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.25	0.61		0.11		0.26	0.71		0.02	1.06	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 8 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 24.6		Intersection LOS: C	
Intersection Capacity Utilization 63.4%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	0	141	17	0	4	83	1159	20	5	1374	45
Future Volume (veh/h)	81	0	141	17	0	4	83	1159	20	5	1374	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1900	1900	1900	1900	1817	1817	1876	2175	2115	2130
Adj Flow Rate, veh/h	84	0	147	18	0	4	86	1207	21	5	1431	47
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	0	0	0	4	4	0	0	4	3
Cap, veh/h	283	0	278	167	9	20	338	2603	45	427	2521	1132
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.07	1.00	1.00	0.63	0.63	0.63
Sat Flow, veh/h	1596	0	1610	679	76	168	1731	3472	60	528	4019	1804
Grp Volume(v), veh/h	84	0	147	22	0	0	86	600	628	5	1431	47
Grp Sat Flow(s),veh/h/ln	1596	0	1610	924	0	0	1731	1726	1806	528	2010	1804
Q Serve(g_s), s	0.0	0.0	6.2	0.6	0.0	0.0	1.1	0.1	0.1	0.3	15.5	0.7
Cycle Q Clear(g_c), s	3.2	0.0	6.2	3.8	0.0	0.0	1.1	0.1	0.1	0.3	15.5	0.7
Prop In Lane	1.00		1.00	0.82		0.18	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	283	0	278	195	0	0	338	1294	1354	427	2521	1132
V/C Ratio(X)	0.30	0.00	0.53	0.11	0.00	0.00	0.25	0.46	0.46	0.01	0.57	0.04
Avail Cap(c_a), veh/h	497	0	519	392	0	0	473	1294	1354	427	2521	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.74	0.74	0.74	0.52	0.52	0.52
Uniform Delay (d), s/veh	30.7	0.0	28.2	30.8	0.0	0.0	5.9	0.0	0.0	5.3	8.1	5.3
Incr Delay (d2), s/veh	0.6	0.0	1.6	0.3	0.0	0.0	0.3	0.9	0.8	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	0.0	4.5	0.7	0.0	0.0	0.5	0.6	0.6	0.0	8.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	0.0	29.8	31.0	0.0	0.0	6.2	0.9	0.9	5.3	8.6	5.4
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		231			22			1314			1483	
Approach Delay, s/veh		30.3			31.0			1.2			8.5	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		61.2		13.8	9.2	52.1		13.8				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		45.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s		2.1		8.2	3.1	17.5		5.8				
Green Ext Time (p_c), s		5.2		0.6	0.1	5.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			7.2									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	20	596	9	5	616
Future Vol, veh/h	31	20	596	9	5	616
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	8	0	0	8
Mvmt Flow	37	24	718	11	6	742

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1478	724	0	0	729	0
Stage 1	724	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	270	504	-	-	884	-
Stage 1	667	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	267	504	-	-	884	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	647	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.5	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	327	884	-
HCM Lane V/C Ratio	-	-	0.188	0.007	-
HCM Control Delay (s)	-	-	18.5	9.1	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	975	28	187	936	27	124
Future Vol, veh/h	975	28	187	936	27	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	7	6	6	0	7
Mvmt Flow	1037	30	199	996	29	132

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1067	0	2446	1052
Stage 1	-	-	-	-	1052	-
Stage 2	-	-	-	-	1394	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	638	-	60	302
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	316	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	638	-	41	302
Mov Cap-2 Maneuver	-	-	-	-	148	-
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	217	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	40.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	255	-	-	638	-
HCM Lane V/C Ratio	0.63	-	-	0.312	-
HCM Control Delay (s)	40.4	-	-	13.2	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	3.9	-	-	1.3	-

Intersection	
Int Delay, s/veh	71.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	83	145	225	164	6	194	9	304	3	4	3
Future Vol, veh/h	0	83	145	225	164	6	194	9	304	3	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	93	163	253	184	7	218	10	342	3	4	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	191	0	0	256	0	0	872	872	175	1045	950	188
Stage 1	-	-	-	-	-	-	175	175	-	694	694	-
Stage 2	-	-	-	-	-	-	697	697	-	351	256	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1395	-	-	1280	-	-	326	353	875	234	265	868
Stage 1	-	-	-	-	-	-	855	788	-	471	444	-
Stage 2	-	-	-	-	-	-	500	520	-	696	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1395	-	-	1280	-	-	265	275	875	115	206	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	265	275	-	115	206	-
Stage 1	-	-	-	-	-	-	855	788	-	471	346	-
Stage 2	-	-	-	-	-	-	383	405	-	419	674	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.8	156.1	23.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	456	1395	-	-	1280	-	-	204
HCM Lane V/C Ratio	1.249	-	-	-	0.198	-	-	0.055
HCM Control Delay (s)	156.1	0	-	-	8.5	0	-	23.7
HCM Lane LOS	F	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	23.4	0	-	-	0.7	-	-	0.2

Intersection	
Int Delay, s/veh	103.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	0	48	0	0	17	17	1620	2	3	1699	71
Future Vol, veh/h	68	0	48	0	0	17	17	1620	2	3	1699	71
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	22	0	12	0	0	31	17	7	50	100	5	34
Mvmt Flow	75	0	53	0	0	19	19	1780	2	3	1867	78

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2840	3732	973	2759	3770	891	1945	0	0	1782	0	0
Stage 1	1912	1912	-	1819	1819	-	-	-	-	-	-	-
Stage 2	928	1820	-	940	1951	-	-	-	-	-	-	-
Critical Hdwy	8.34	6.9	7.34	7.5	6.5	7.52	4.44	-	-	6.1	-	-
Critical Hdwy Stg 1	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.72	4	3.42	3.5	4	3.61	2.37	-	-	3.2	-	-
Pot Cap-1 Maneuver	~ 7	0	*352	39	0	*372	*508	-	-	*419	-	-
Stage 1	~ 45	95	-	82	130	-	-	-	-	-	-	-
Stage 2	227	106	-	287	112	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	~ 7	0	*352	32	0	*372	*508	-	-	*419	-	-
Mov Cap-2 Maneuver	~ 7	0	-	32	0	-	-	-	-	-	-	-
Stage 1	~ 43	94	-	79	125	-	-	-	-	-	-	-
Stage 2	208	102	-	242	111	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	3161.5	15.2	0.1	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 508	-	-	7	352	372	* 419	-	-
HCM Lane V/C Ratio	0.037	-	-	10.675	0.15	0.05	0.008	-	-
HCM Control Delay (s)	12.4	-	-	$ 5381.2	17	15.2	13.7	-	-
HCM Lane LOS	B	-	-	F	C	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	11	0.5	0.2	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	2	6	0	0	0	13	443	29	32	359	16
Future Vol, veh/h	25	2	6	0	0	0	13	443	29	32	359	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	7	18	5	0
Mvmt Flow	29	2	7	0	0	0	15	515	34	37	417	19

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1063	1080	427	436	0	0	549	0	0
Stage 1	501	501	-	-	-	-	-	-	-
Stage 2	562	579	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	4.28	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	2.362	-	-
Pot Cap-1 Maneuver	249	220	632	1134	-	-	945	-	-
Stage 1	613	546	-	-	-	-	-	-	-
Stage 2	575	504	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	232	0	632	1134	-	-	945	-	-
Mov Cap-2 Maneuver	232	0	-	-	-	-	-	-	-
Stage 1	601	0	-	-	-	-	-	-	-
Stage 2	545	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.8	0.2	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1134	-	-	232	632	945	-	-
HCM Lane V/C Ratio	0.013	-	-	0.125	0.015	0.039	-	-
HCM Control Delay (s)	8.2	0	-	22.7	10.8	9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	39	468	0	0	374
Future Vol, veh/h	33	39	468	0	0	374
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	18	6	0	0	7
Mvmt Flow	38	44	532	0	0	425

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	957	532	0	0	532	0
Stage 1	532	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Critical Hdwy	6	6.18	-	-	4.1	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	-	-	2.2	-
Pot Cap-1 Maneuver	321	533	-	-	1046	-
Stage 1	629	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	321	533	-	-	1046	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	629	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	409	1046	-
HCM Lane V/C Ratio	-	-	0.2	-	-
HCM Control Delay (s)	-	-	16	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	366	25	26	355	41	24
Future Vol, veh/h	366	25	26	355	41	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	8	5	0	4	0	0
Mvmt Flow	411	28	29	399	46	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	439	0	882	425
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	457	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1132	-	262	604
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	580	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1132	-	253	604
Mov Cap-2 Maneuver	-	-	-	-	253	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	561	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	19.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	322	-	-	1132	-
HCM Lane V/C Ratio	0.227	-	-	0.026	-
HCM Control Delay (s)	19.4	-	-	8.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	364	26	18	329	52	58
Future Vol, veh/h	364	26	18	329	52	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	7	4	31	5	13	4
Mvmt Flow	414	30	20	374	59	66

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	444	0	843	429
Stage 1	-	-	-	-	429	-
Stage 2	-	-	-	-	414	-
Critical Hdwy	-	-	4.41	-	5.33	5.64
Critical Hdwy Stg 1	-	-	-	-	4.33	-
Critical Hdwy Stg 2	-	-	-	-	4.33	-
Follow-up Hdwy	-	-	2.479	-	3.617	3.336
Pot Cap-1 Maneuver	-	-	978	-	424	668
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	739	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	978	-	413	668
Mov Cap-2 Maneuver	-	-	-	-	413	-
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	720	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	517	-	-	978	-
HCM Lane V/C Ratio	0.242	-	-	0.021	-
HCM Control Delay (s)	14.2	-	-	8.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	51	30	586	571	8
Future Vol, veh/h	25	51	30	586	571	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	4	-	-	2	-2	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	33	67	5	6	0
Mvmt Flow	30	61	36	698	680	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1455	685	690	0	-	0
Stage 1	685	-	-	-	-	-
Stage 2	770	-	-	-	-	-
Critical Hdwy	7.2	6.93	4.77	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.597	2.803	-	-	-
Pot Cap-1 Maneuver	105	370	665	-	-	-
Stage 1	433	-	-	-	-	-
Stage 2	388	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	99	370	665	-	-	-
Mov Cap-2 Maneuver	99	-	-	-	-	-
Stage 1	410	-	-	-	-	-
Stage 2	388	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38.5	0.5	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	665	-	195	-	-
HCM Lane V/C Ratio	0.054	-	0.464	-	-
HCM Control Delay (s)	10.7	-	38.5	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.2	-	2.2	-	-

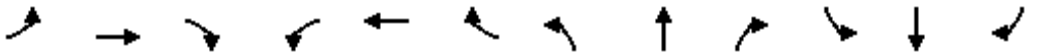
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	59	18	555	632	15
Future Vol, veh/h	51	59	18	555	632	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	8	8	0
Mvmt Flow	59	68	21	638	726	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1415	735	743	0	-	0
Stage 1	735	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	166	432	873	-	-	-
Stage 1	498	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	160	432	873	-	-	-
Mov Cap-2 Maneuver	160	-	-	-	-	-
Stage 1	480	-	-	-	-	-
Stage 2	526	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35.1	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	873	-	242	-	-
HCM Lane V/C Ratio	0.024	-	0.522	-	-
HCM Control Delay (s)	9.2	0	35.1	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0.1	-	2.8	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	229	530	50	141	556	142	136	230	65	174	218	175
Future Volume (vph)	229	530	50	141	556	142	136	230	65	174	218	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		0	1		1	1		0	2		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor						0.97		1.00		1.00	0.99	
Frt		0.987				0.850		0.967			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	3270	0	1752	1727	1442	1901	1748	0	3266	1759	0
Flt Permitted	0.077			0.297			0.106			0.950		
Satd. Flow (perm)	135	3270	0	548	1727	1405	212	1748	0	3254	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				173		9			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	5%	5%	9%	3%	10%	12%	6%	5%	11%	13%	6%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	279	707	0	172	678	173	166	359	0	212	479	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases	2	9		6	9	6	8					
Detector Phase	5	2		1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0		9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	24.0	59.0		17.0	52.0	24.0	19.0	41.0		24.0	46.0	
Total Split (%)	16.0%	39.3%		11.3%	34.7%	16.0%	12.7%	27.3%		16.0%	30.7%	
Maximum Green (s)	18.0	53.0		11.0	46.0	18.0	13.0	35.0		18.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	70.1	54.9		56.4	47.2	59.8	49.6	37.7		13.7	39.6	
Actuated g/C Ratio	0.49	0.38		0.39	0.33	0.42	0.35	0.26		0.10	0.28	

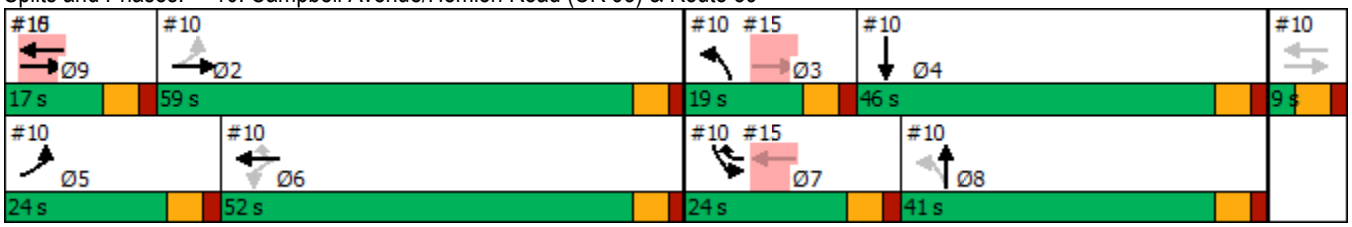
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	6%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.08	0.56		0.57	1.19	0.25	0.78	0.77		0.68	0.95	
Control Delay	118.6	36.1		31.2	143.3	4.0	58.3	60.4		74.0	77.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	118.6	36.1		31.2	143.3	4.0	58.3	60.4		74.0	77.3	
LOS	F	D		C	F	A	E	E		E	E	
Approach Delay		59.4			100.9			59.7			76.3	
Approach LOS		E			F			E			E	
Queue Length 50th (ft)	~233	266		86	~754	0	96	292		98	409	
Queue Length 95th (ft)	#392	276		135	#847	30	#180	#416		132	#576	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75			180		560	150			145		
Base Capacity (vph)	258	1259		311	570	729	229	467		411	511	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.08	0.56		0.55	1.19	0.24	0.72	0.77		0.52	0.94	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 143
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 76.2 Intersection LOS: E
Intersection Capacity Utilization 91.7% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	520	364	20	91	283	501	50	616	124	501	484	573
Future Volume (vph)	520	364	20	91	283	501	50	616	124	501	484	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.992				0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3410	1692	0	1811	1761	1299	1555	3343	0	1656	1627	1409
Flt Permitted	0.950			0.430			0.108			0.123		
Satd. Flow (perm)	3410	1692	0	820	1761	1299	177	3343	0	214	1627	1409
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		2						11				369
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	531	391	0	93	289	511	51	756	0	511	494	585
Turn Type	Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8		7	4	5
Permitted Phases		10		6	10	6	8			4		4
Detector Phase	5	2		1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0		3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0		8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	33.0	65.0		25.0	57.0	38.0	8.0	42.0		38.0	72.0	33.0
Total Split (%)	17.4%	34.2%		13.2%	30.0%	20.0%	4.2%	22.1%		20.0%	37.9%	17.4%
Maximum Green (s)	28.0	60.0		20.0	52.0	33.0	3.0	37.0		33.0	67.0	28.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	28.1	49.1		33.0	29.8	57.3	61.9	37.1		71.7	45.5	73.6
Actuated g/C Ratio	0.19	0.33		0.22	0.20	0.38	0.41	0.25		0.48	0.30	0.49
v/c Ratio	0.83	0.70		0.39	0.83	1.03	0.17	0.91		1.22	1.00	0.67
Control Delay	71.6	48.8		39.2	68.9	77.2	39.3	69.5		162.2	92.1	8.5

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

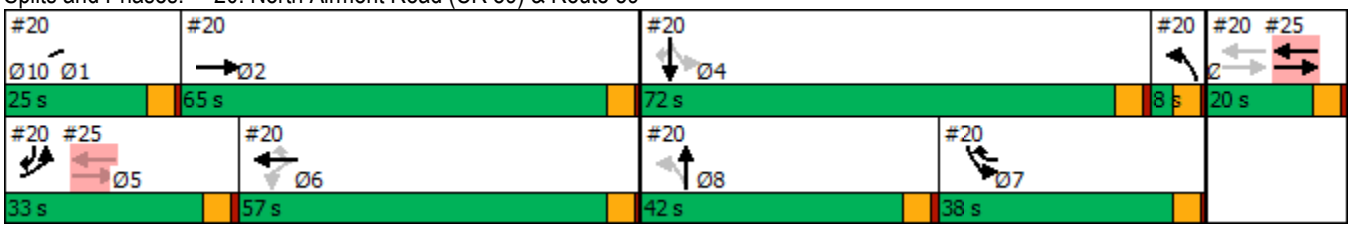
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.1	0.0
Total Delay	71.6	48.8		39.2	68.9	77.2	39.3	69.5		162.2	92.2	8.5
LOS	E	D		D	E	E	D	E		F	F	A
Approach Delay		61.9			70.6			67.6			83.9	
Approach LOS		E			E			E			F	
Queue Length 50th (ft)	255	324		54	269	240	24	366		~534	~548	62
Queue Length 95th (ft)	#395	377		112	264	#719	#81	#566		#881	596	103
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330			175		170	140			100		
Base Capacity (vph)	638	743		374	678	496	300	835		420	729	878
Starvation Cap Reductn	0	0		0	0	0	0	0		0	14	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.83	0.53		0.25	0.43	1.03	0.17	0.91		1.22	0.69	0.67

Intersection Summary	
Area Type:	Other
Cycle Length: 190	
Actuated Cycle Length: 150.1	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 73.2	Intersection LOS: E
Intersection Capacity Utilization 95.1%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

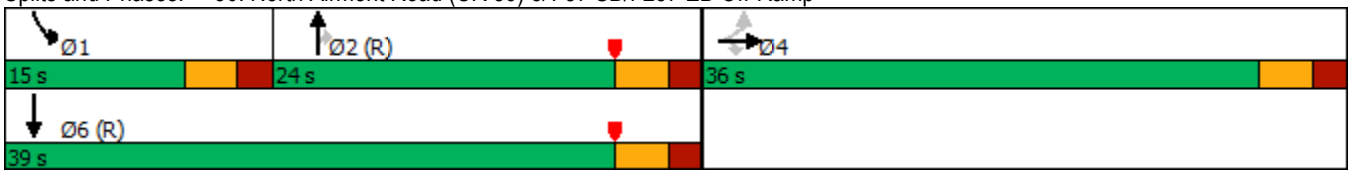
HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	382	6	519	0	0	0	0	924	780	439	1035	0
Future Volume (vph)	382	6	519	0	0	0	0	924	780	439	1035	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1616	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						433			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	5%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	392	524	0	0	0	0	933	788	443	1045	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					24.0	24.0	15.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					32.0%	32.0%	20.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					19.0	19.0	10.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		27.9	27.9					22.1	22.1	10.0	37.1	
Actuated g/C Ratio		0.37	0.37					0.29	0.29	0.13	0.49	
v/c Ratio		0.67	0.92					1.04	1.01	0.94	0.61	
Control Delay		25.6	41.4					64.3	43.9	51.2	10.4	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		25.6	41.4					64.3	43.9	51.2	10.4	
LOS		C	D					E	D	D	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		34.6						54.9			22.6	
Approach LOS		C						D			C	
Queue Length 50th (ft)		138	175					~287	~250	94	122	
Queue Length 95th (ft)		228	#363					#388	#437	m#113	m181	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					894	780	469	1724	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.61	0.85					1.04	1.01	0.94	0.61	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 38.8		Intersection LOS: D	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	6	519	0	0	0	0	924	780	439	1035	0
Future Volume (veh/h)	382	6	519	0	0	0	0	924	780	439	1035	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1844	2067	2007	0
Adj Flow Rate, veh/h	386	6	524				0	933	0	443	1045	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	5	2	6	0
Cap, veh/h	605	9	531				0	796		509	1728	0
Arrive On Green	0.41	0.41	0.41				0.00	0.51	0.00	0.09	0.30	0.00
Sat Flow, veh/h	1464	23	1284				0	3226	1563	3818	3913	0
Grp Volume(v), veh/h	392	0	524				0	933	0	443	1045	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1563	1909	1906	0
Q Serve(g_s), s	15.8	0.0	30.3				0.0	19.0	0.0	8.6	17.5	0.0
Cycle Q Clear(g_c), s	15.8	0.0	30.3				0.0	19.0	0.0	8.6	17.5	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	615	0	531				0	796		509	1728	0
V/C Ratio(X)	0.64	0.00	0.99				0.00	1.17		0.87	0.60	0.00
Avail Cap(c_a), veh/h	615	0	531				0	796		509	1728	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.23	0.23	0.00
Uniform Delay (d), s/veh	17.5	0.0	21.8				0.0	18.5	0.0	33.5	20.4	0.0
Incr Delay (d2), s/veh	1.7	0.0	35.5				0.0	90.4	0.0	3.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	0.0	19.5				0.0	21.9	0.0	5.9	10.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	0.0	57.3				0.0	108.9	0.0	37.4	20.7	0.0
LnGrp LOS	B	A	E				A	F		D	C	A
Approach Vol, veh/h		916						933			1488	
Approach Delay, s/veh		41.0						108.9			25.7	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	24.0		36.0		39.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	10.0	19.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.6	0.0		32.3		0.0
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.2
HCM 6th LOS	D

Notes

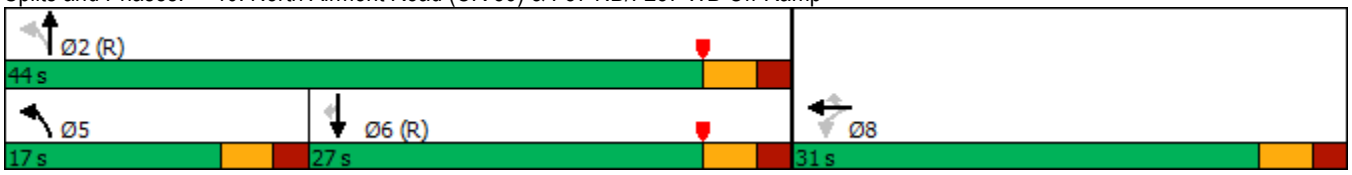
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	692	1	383	361	946	0	0	782	326
Future Volume (vph)	0	0	0	692	1	383	361	946	0	0	782	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1588	1591	1553	1344	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.142					
Satd. Flow (perm)	0	0	0	1588	1591	1553	201	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						355
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	8%	0%	4%	24%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	474	475	525	495	1296	0	0	1071	447
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	17.0	44.0			27.0	27.0
Total Split (%)				41.3%	41.3%	41.3%	22.7%	58.7%			36.0%	36.0%
Maximum Green (s)				26.0	26.0	26.0	12.0	39.0			22.0	22.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.9	24.9	24.9	40.1	40.1			23.1	23.1
Actuated g/C Ratio				0.33	0.33	0.33	0.53	0.53			0.31	0.31
v/c Ratio				0.90	0.90	0.90	1.71	0.81			0.96	0.63
Control Delay				46.3	46.4	39.9	347.5	19.2			43.3	9.1
Queue Delay				0.0	0.0	0.0	0.0	0.0			20.9	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				46.3	46.4	39.9	347.5	19.2			64.2	9.8
LOS				D	D	D	F	B			E	A
Approach Delay					44.0			109.9			48.2	
Approach LOS					D			F			D	
Queue Length 50th (ft)				212	212	185	~317	315			~268	76
Queue Length 95th (ft)				248	248	217	m#334	m270			187	9
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				550	551	605	290	1593			1117	707
Starvation Cap Reductn				0	0	0	0	0			92	76
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.86	0.86	0.87	1.71	0.81			1.04	0.71

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.71			
Intersection Signal Delay: 70.0		Intersection LOS: E	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



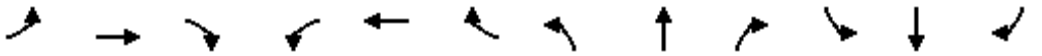
HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Intersection	
Intersection Delay, s/veh	51.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	152	231	315	78	2	96	1	199	2	1	0
Future Vol, veh/h	0	152	231	315	78	2	96	1	199	2	1	0
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	211	321	438	108	3	133	1	276	3	1	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	44.1	75.1	29.7	12.3
HCM LOS	E	F	D	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	0%	80%	67%
Vol Thru, %	0%	40%	20%	33%
Vol Right, %	67%	60%	1%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	296	383	395	3
LT Vol	96	0	315	2
Through Vol	1	152	78	1
RT Vol	199	231	2	0
Lane Flow Rate	411	532	549	4
Geometry Grp	1	1	1	1
Degree of Util (X)	0.772	0.91	1.037	0.01
Departure Headway (Hd)	6.952	6.369	6.803	9.199
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	522	575	538	391
Service Time	4.952	4.369	4.803	7.199
HCM Lane V/C Ratio	0.787	0.925	1.02	0.01
HCM Control Delay	29.7	44.1	75.1	12.3
HCM Lane LOS	D	E	F	B
HCM 95th-tile Q	6.9	11.1	15.6	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	242	632	115	93	728	141	185	192	115	257	221	231
Future Volume (vph)	242	632	115	93	728	141	185	192	115	257	221	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		0	1		1	1		0	2		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt		0.977				0.850		0.944			0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1631	3283	0	1752	1810	1417	1919	1731	0	3417	1744	0
Flt Permitted	0.073			0.331			0.161			0.950		
Satd. Flow (perm)	125	3283	0	611	1810	1417	325	1731	0	3411	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				164		18			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	4%	3%	3%	5%	14%	5%	5%	4%	8%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	771	0	96	751	145	191	317	0	265	466	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases	2	9		6	9	6	8					
Detector Phase	5	2		1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0		9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	24.0	67.0		12.0	55.0	26.0	20.0	26.0		26.0	32.0	
Total Split (%)	17.1%	47.9%		8.6%	39.3%	18.6%	14.3%	18.6%		18.6%	22.9%	
Maximum Green (s)	18.0	61.0		6.0	49.0	20.0	14.0	20.0		20.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	73.1	61.7		55.0	49.6	69.8	37.9	24.9		14.8	26.8	
Actuated g/C Ratio	0.55	0.47		0.42	0.37	0.53	0.29	0.19		0.11	0.20	

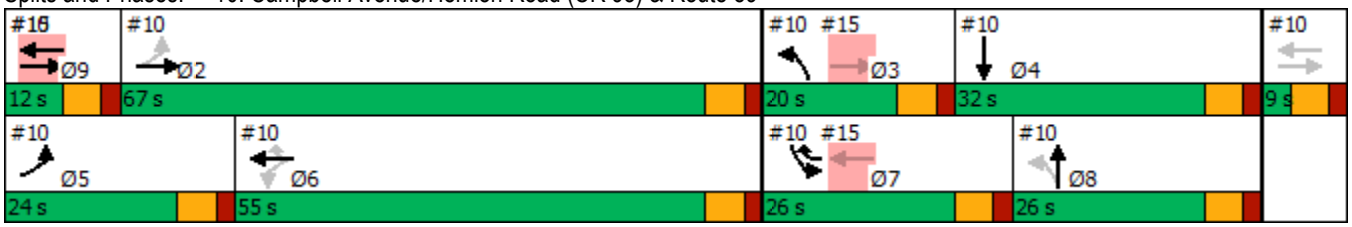
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	6%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.91	0.50		0.32	1.11	0.18	0.77	0.93		0.70	1.23	
Control Delay	72.4	25.5		20.2	106.9	2.1	54.8	84.6		67.1	166.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	72.4	25.5		20.2	106.9	2.1	54.8	84.6		67.1	166.4	
LOS	E	C		C	F	A	D	F		E	F	
Approach Delay		37.0			83.2			73.4			130.4	
Approach LOS		D			F			E			F	
Queue Length 50th (ft)	162	229		37	~728	0	116	252		113	~472	
Queue Length 95th (ft)	#373	247		79	#1072	26	#246	#504		169	#729	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75			180		560	150			145		
Base Capacity (vph)	273	1539		305	678	874	264	340		516	378	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.91	0.50		0.31	1.11	0.17	0.72	0.93		0.51	1.23	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 132.5
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.23
Intersection Signal Delay: 77.8 Intersection LOS: E
Intersection Capacity Utilization 107.7% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	564	459	77	146	396	558	64	496	168	452	646	662
Future Volume (vph)	564	459	77	146	396	558	64	496	168	452	646	662
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.979				0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3345	1759	0	1829	1828	1398	1626	3279	0	1703	1739	1436
Flt Permitted	0.950			0.133			0.107			0.136		
Satd. Flow (perm)	3345	1759	0	256	1828	1398	183	3279	0	244	1739	1436
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5						22				235
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	581	552	0	151	408	575	66	684	0	466	666	682
Turn Type	Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8		7	4	5
Permitted Phases		10		6	10	6	8			4		4
Detector Phase	5	2		1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0		8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	33.0	65.0		25.0	57.0	38.0	8.0	42.0		38.0	72.0	33.0
Total Split (%)	17.4%	34.2%		13.2%	30.0%	20.0%	4.2%	22.1%		20.0%	37.9%	17.4%
Maximum Green (s)	28.0	60.0		20.0	52.0	33.0	3.0	37.0		33.0	67.0	28.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	28.2	59.5		51.3	44.0	71.8	40.3	37.3		75.6	67.6	95.8
Actuated g/C Ratio	0.17	0.36		0.31	0.27	0.44	0.24	0.23		0.46	0.41	0.58

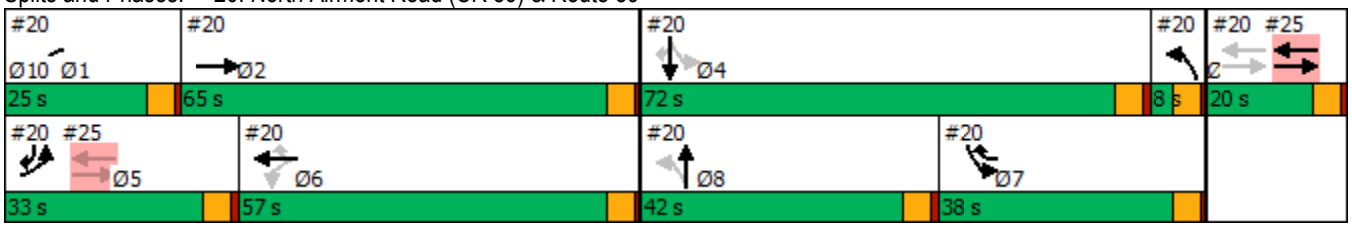
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.01	0.87		0.76	0.84	0.94	0.93	0.90		1.15	0.93	0.73
Control Delay	106.9	61.0		56.8	66.4	50.1	138.8	75.9		142.7	68.0	16.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	20.0	0.0
Total Delay	106.9	61.0		56.8	66.4	50.1	138.8	75.9		142.7	88.0	16.1
LOS	F	E		E	E	D	F	E		F	F	B
Approach Delay		84.5			56.9			81.4			75.0	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	312	530		90	409	279	37	352		~479	639	244
Queue Length 95th (ft)	#574	558		173	376	#605	#154	#607		#924	#1183	443
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330			175		170	140			100		
Base Capacity (vph)	573	706		283	641	609	71	759		406	713	933
Starvation Cap Reductn	0	0		0	0	0	0	0		0	68	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.01	0.78		0.53	0.64	0.94	0.93	0.90		1.15	1.03	0.73

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 164.8
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 74.0 Intersection LOS: E
Intersection Capacity Utilization 104.5% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

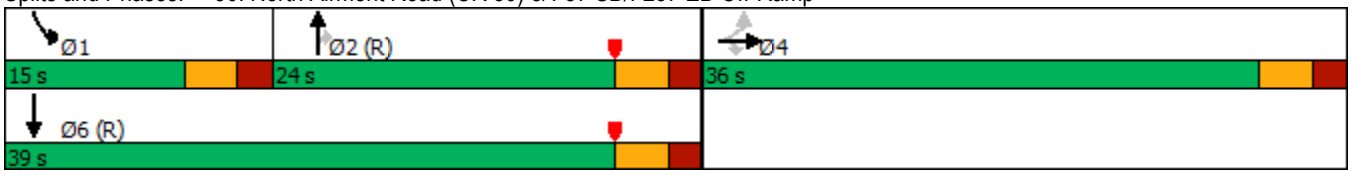
HCM 6th Edition methodology does not support clustered intersections.

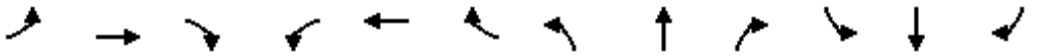
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	303	3	362	0	0	0	0	877	829	510	1412	0
Future Volume (vph)	303	3	362	0	0	0	0	877	829	510	1412	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1550	1445	0	0	0	0	3154	1616	3485	3524	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1550	1445	0	0	0	0	3154	1595	3481	3524	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						485			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	9%	0%	0%	0%	0%	9%	5%	3%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	309	366	0	0	0	0	886	837	515	1426	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					24.0	24.0	15.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					32.0%	32.0%	20.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					19.0	19.0	10.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		20.5	20.5					29.5	29.5	10.0	44.5	
Actuated g/C Ratio		0.27	0.27					0.39	0.39	0.13	0.59	
v/c Ratio		0.73	0.78					0.71	0.91	1.11	0.68	
Control Delay		34.3	29.2					20.0	18.9	91.3	5.4	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		34.3	29.2					20.0	18.9	91.3	5.6	
LOS		C	C					C	B	F	A	
Approach Delay		31.5						19.5			28.3	
Approach LOS		C						B			C	
Queue Length 50th (ft)		132	115					79	64	~136	0	
Queue Length 95th (ft)		179	177					m#309	m#390	m#169	m241	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		640	657					1242	922	464	2092	
Starvation Cap Reductn		0	0					0	0	0	125	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.48	0.56					0.71	0.91	1.11	0.72	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 25.3		Intersection LOS: C	
Intersection Capacity Utilization 134.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	303	3	362	0	0	0	0	877	829	510	1412	0
Future Volume (veh/h)	303	3	362	0	0	0	0	877	829	510	1412	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1619				0	1714	1844	2052	2022	0
Adj Flow Rate, veh/h	306	3	366				0	886	0	515	1426	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	9				0	9	5	3	5	0
Cap, veh/h	494	5	410				0	1198		505	2182	0
Arrive On Green	0.30	0.30	0.30				0.00	0.74	0.00	0.13	0.57	0.00
Sat Flow, veh/h	1654	16	1372				0	3342	1563	3791	3942	0
Grp Volume(v), veh/h	309	0	366				0	886	0	515	1426	0
Grp Sat Flow(s),veh/h/ln	1670	0	1372				0	1628	1563	1895	1921	0
Q Serve(g_s), s	11.9	0.0	19.1				0.0	11.8	0.0	10.0	19.1	0.0
Cycle Q Clear(g_c), s	11.9	0.0	19.1				0.0	11.8	0.0	10.0	19.1	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	499	0	410				0	1198		505	2182	0
V/C Ratio(X)	0.62	0.00	0.89				0.00	0.74		1.02	0.65	0.00
Avail Cap(c_a), veh/h	690	0	567				0	1198		505	2182	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	22.6	0.0	25.2				0.0	7.8	0.0	32.5	11.1	0.0
Incr Delay (d2), s/veh	0.5	0.0	10.5				0.0	4.1	0.0	17.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	0.0	11.4				0.0	5.1	0.0	6.9	8.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	0.0	35.6				0.0	11.9	0.0	49.6	11.3	0.0
LnGrp LOS	C	A	D				A	B		F	B	A
Approach Vol, veh/h		675						886			1941	
Approach Delay, s/veh		29.9						11.9			21.4	
Approach LOS		C						B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	32.6		27.4		47.6
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	10.0	19.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	12.0	0.0		21.1		0.0
Green Ext Time (p_c), s	0.0	0.0		1.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

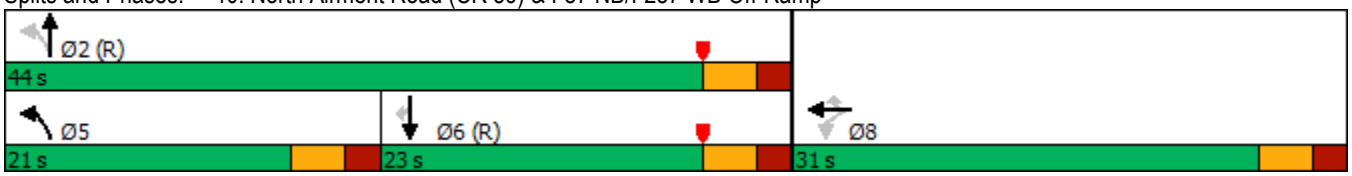
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	894	2	514	430	749	0	0	1027	505
Future Volume (vph)	0	0	0	894	2	514	430	749	0	0	1027	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1649	1654	1583	1462	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.161					
Satd. Flow (perm)	0	0	0	1649	1654	1583	248	3064	0	0	3593	1507
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						158						389
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	4%	3%	2%	14%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	456	458	524	439	764	0	0	1048	515
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	21.0	44.0			23.0	23.0
Total Split (%)				41.3%	41.3%	41.3%	28.0%	58.7%			30.7%	30.7%
Maximum Green (s)				26.0	26.0	26.0	16.0	39.0			18.0	18.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.1	24.1	24.1	40.9	40.9			19.9	19.9
Actuated g/C Ratio				0.32	0.32	0.32	0.55	0.55			0.27	0.27
v/c Ratio				0.86	0.86	0.85	1.11	0.46			1.10	0.75
Control Delay				41.5	41.6	31.1	92.6	5.5			89.0	23.5
Queue Delay				1.2	1.2	0.4	0.0	0.0			1.1	1.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				42.8	42.8	31.5	92.6	5.5			90.0	24.5
LOS				D	D	C	F	A			F	C
Approach Delay					38.7			37.3			68.4	
Approach LOS					D			D			E	
Queue Length 50th (ft)				197	198	154	~200	104			~336	137
Queue Length 95th (ft)				#356	#358	#324	#350	22			#460	#281
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				571	573	652	394	1671			954	686
Starvation Cap Reductn				0	0	0	0	0			81	45
Spillback Cap Reductn				27	27	13	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.84	0.84	0.82	1.11	0.46			1.20	0.80

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 49.3		Intersection LOS: D	
Intersection Capacity Utilization 134.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Intersection	
Intersection Delay, s/veh	34.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	83	145	225	164	6	194	9	304	3	4	3
Future Vol, veh/h	0	83	145	225	164	6	194	9	304	3	4	3
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	93	163	253	184	7	218	10	342	3	4	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.2	31.4	46.5	10.8
HCM LOS	C	D	E	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	0%	57%	30%
Vol Thru, %	2%	36%	42%	40%
Vol Right, %	60%	64%	2%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	507	228	395	10
LT Vol	194	0	225	3
Through Vol	9	83	164	4
RT Vol	304	145	6	3
Lane Flow Rate	570	256	444	11
Geometry Grp	1	1	1	1
Degree of Util (X)	0.935	0.465	0.805	0.024
Departure Headway (Hd)	5.91	6.529	6.533	7.545
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	615	551	555	471
Service Time	3.953	4.589	4.585	5.639
HCM Lane V/C Ratio	0.927	0.465	0.8	0.023
HCM Control Delay	46.5	15.2	31.4	10.8
HCM Lane LOS	E	C	D	B
HCM 95th-tile Q	12.3	2.4	7.8	0.1

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	37	86	462	607	47
Future Vol, veh/h	8	37	86	462	607	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	4	-	-	2	-2	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	0	73	27	7	7	0
Mvmt Flow	11	53	123	660	867	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1807	901	934	0	-	0
Stage 1	901	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Critical Hdwy	7.2	7.33	4.37	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.957	2.443	-	-	-
Pot Cap-1 Maneuver	59	229	640	-	-	-
Stage 1	327	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	48	229	640	-	-	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	264	-	-	-	-	-
Stage 2	325	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	52.6	1.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	640	-	137	-	-
HCM Lane V/C Ratio	0.192	-	0.469	-	-
HCM Control Delay (s)	12	-	52.6	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	2.1	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	18	109	538	548	94
Future Vol, veh/h	16	18	109	538	548	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	0	10	11	0
Mvmt Flow	22	24	147	727	741	127

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1826	805	868	0	-	0
Stage 1	805	-	-	-	-	-
Stage 2	1021	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	95	394	785	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	371	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	65	394	785	-	-	-
Mov Cap-2 Maneuver	65	-	-	-	-	-
Stage 1	318	-	-	-	-	-
Stage 2	371	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	54.4	1.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	785	-	117	-	-
HCM Lane V/C Ratio	0.188	-	0.393	-	-
HCM Control Delay (s)	10.6	0	54.4	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q(veh)	0.7	-	1.6	-	-

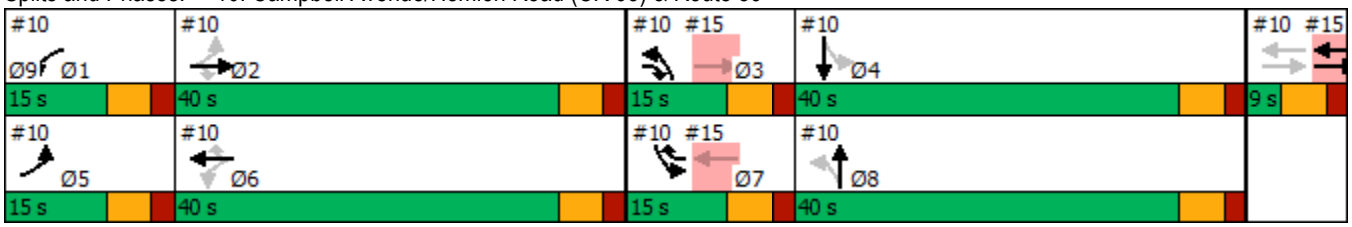
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	508	48	134	532	189	130	234	62	183	207	171
Future Volume (vph)	243	508	48	134	532	189	130	234	62	183	207	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98		0.99		1.00	0.99	
Frt			0.850			0.850		0.968			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	1749	1432	1752	1727	1429	1901	1748	0	1599	1743	0
Flt Permitted	0.116			0.117			0.134			0.267		
Satd. Flow (perm)	203	1749	1432	216	1727	1394	268	1748	0	448	1743	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			230		11			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	5%	5%	9%	3%	10%	13%	6%	5%	11%	19%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	296	620	59	163	649	230	159	361	0	223	461	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.4	35.5	49.1	43.1	35.3	43.3	38.4	29.8		39.3	30.2	
Actuated g/C Ratio	0.40	0.32	0.45	0.39	0.32	0.40	0.35	0.27		0.36	0.28	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.48	1.10	0.08	0.78	1.17	0.33	0.72	0.75		0.87	0.91	
Control Delay	264.1	102.7	0.2	49.0	128.1	4.3	41.1	46.2		59.6	59.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	264.1	102.7	0.2	49.0	128.1	4.3	41.1	46.2		59.6	59.7	
LOS	F	F	A	D	F	A	D	D		E	E	
Approach Delay		145.5			88.4			44.6			59.6	
Approach LOS		F			F			D			E	
Queue Length 50th (ft)	~242	~511	0	68	~558	0	66	214		99	280	
Queue Length 95th (ft)	#403	#623	0	#161	#723	33	#115	311		#202	#420	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	200	566	722	212	556	692	230	553		255	568	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.48	1.10	0.08	0.77	1.17	0.33	0.69	0.65		0.87	0.81	

Intersection Summary			
Area Type:	Other		
Cycle Length: 119			
Actuated Cycle Length: 109.6			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.48			
Intersection Signal Delay: 92.5		Intersection LOS: F	
Intersection Capacity Utilization 90.1%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

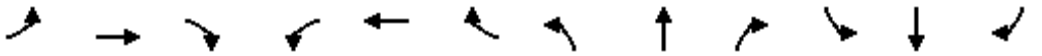
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	512	349	19	87	277	478	48	586	118	477	461	585
Future Volume (vph)	512	349	19	87	277	478	48	586	118	477	461	585
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1724	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1396
Flt Permitted	0.138			0.548			0.100			0.158		
Satd. Flow (perm)	250	1724	1168	1045	1761	1299	164	3343	0	275	1627	1396
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				366
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	6%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	522	356	19	89	283	488	49	718	0	487	470	597
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	59.1	51.1	72.0	32.5	29.6	54.1	65.9	40.1		69.2	43.7	73.8
Actuated g/C Ratio	0.39	0.34	0.47	0.21	0.19	0.36	0.43	0.26		0.46	0.29	0.49
v/c Ratio	1.34	0.61	0.03	0.33	0.83	1.06	0.16	0.81		1.22	1.00	0.69
Control Delay	207.2	44.0	0.1	37.7	69.5	86.7	41.5	60.3		164.8	95.7	9.5

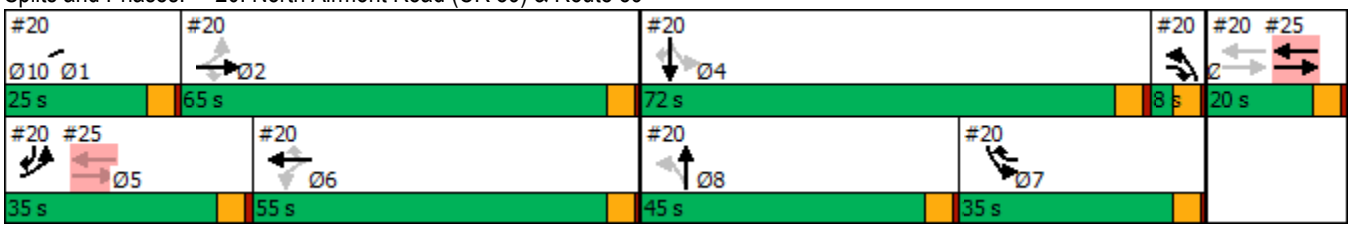
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.1	0.0
Total Delay	207.2	44.0	0.1	37.7	69.5	86.7	41.5	60.3		164.8	95.8	9.5
LOS	F	D	A	D	E	F	D	E		F	F	A
Approach Delay		138.0			76.0			59.1			84.3	
Approach LOS		F			E			E			F	
Queue Length 50th (ft)	~589	287	0	51	267	239	24	338		~501	~519	72
Queue Length 95th (ft)	#958	335	0	108	258	#706	58	#495		#822	590	117
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	389	747	605	404	647	462	314	891		399	720	866
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	7	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.34	0.48	0.03	0.22	0.44	1.06	0.16	0.81		1.22	0.66	0.69

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 151.9
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 89.6 Intersection LOS: F
Intersection Capacity Utilization 106.0% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

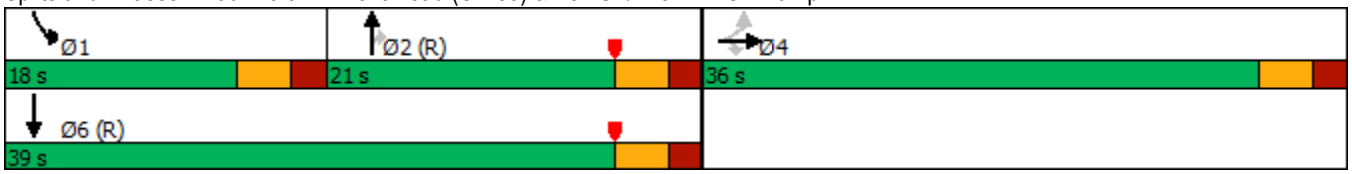
HCM 6th Edition methodology does not support clustered intersections.

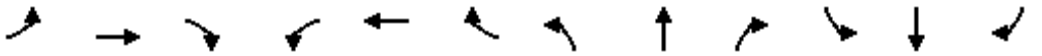
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	6	529	0	0	0	0	890	751	418	991	0
Future Volume (vph)	364	6	529	0	0	0	0	890	751	418	991	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3015	1616	3519	3458	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3015	1616	3519	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						411			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	14%	5%	2%	7%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	374	534	0	0	0	0	899	759	422	1001	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		28.3	28.3					19.6	19.6	12.2	36.7	
Actuated g/C Ratio		0.38	0.38					0.26	0.26	0.16	0.49	
v/c Ratio		0.64	0.93					1.14	1.05	0.74	0.59	
Control Delay		24.1	42.7					103.9	57.9	31.2	11.0	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		24.1	42.7					103.9	57.9	31.2	11.0	
LOS		C	D					F	E	C	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		35.0						82.8			17.0	
Approach LOS		D						F			B	
Queue Length 50th (ft)		130	181					~303	~253	79	142	
Queue Length 95th (ft)		215	#373					#406	#440	m103	m215	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					786	725	609	1692	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.58	0.86					1.14	1.05	0.69	0.59	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.14			
Intersection Signal Delay: 48.5		Intersection LOS: D	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	6	529	0	0	0	0	890	751	418	991	0
Future Volume (veh/h)	364	6	529	0	0	0	0	890	751	418	991	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1640	1844	2067	1992	0
Adj Flow Rate, veh/h	368	6	534				0	899	0	422	1001	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	14	5	2	7	0
Cap, veh/h	605	10	531				0	766		537	1715	0
Arrive On Green	0.41	0.41	0.41				0.00	0.49	0.00	0.05	0.15	0.00
Sat Flow, veh/h	1463	24	1284				0	3197	1563	3818	3884	0
Grp Volume(v), veh/h	374	0	534				0	899	0	422	1001	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1558	1563	1909	1892	0
Q Serve(g_s), s	14.8	0.0	31.0				0.0	18.4	0.0	8.2	18.5	0.0
Cycle Q Clear(g_c), s	14.8	0.0	31.0				0.0	18.4	0.0	8.2	18.5	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	615	0	531				0	766		537	1715	0
V/C Ratio(X)	0.61	0.00	1.01				0.00	1.17		0.79	0.58	0.00
Avail Cap(c_a), veh/h	615	0	531				0	766		662	1715	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.42	0.42	0.00
Uniform Delay (d), s/veh	17.2	0.0	22.0				0.0	19.1	0.0	34.6	25.3	0.0
Incr Delay (d2), s/veh	1.3	0.0	40.5				0.0	91.6	0.0	1.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	0.0	20.7				0.0	21.5	0.0	6.3	12.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	0.0	62.5				0.0	110.7	0.0	36.3	25.9	0.0
LnGrp LOS	B	A	F				A	F		D	C	A
Approach Vol, veh/h		908						899			1423	
Approach Delay, s/veh		44.4						110.7			29.0	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.6	23.4		36.0		39.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.2	0.0		33.0		0.0
Green Ext Time (p_c), s	0.4	0.0		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

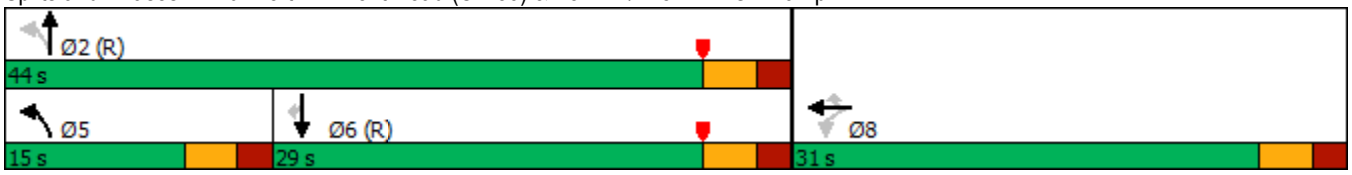
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	664	1	396	351	903	0	0	745	312
Future Volume (vph)	0	0	0	664	1	396	351	903	0	0	745	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1588	1591	1553	1333	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.133					
Satd. Flow (perm)	0	0	0	1588	1591	1553	187	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						370
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	8%	0%	4%	25%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	455	456	542	481	1237	0	0	1021	427
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.9	24.9	24.9	40.1	40.1			25.1	25.1
Actuated g/C Ratio				0.33	0.33	0.33	0.53	0.53			0.33	0.33
v/c Ratio				0.87	0.87	0.93	1.90	0.78			0.84	0.57
Control Delay				41.9	41.9	44.8	434.0	16.7			29.5	7.4
Queue Delay				0.0	0.0	0.0	0.0	0.0			4.2	0.6

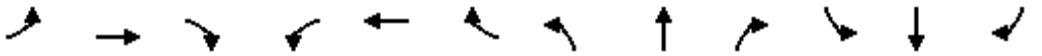
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				41.9	41.9	44.8	434.0	16.7			33.7	8.0
LOS				D	D	D	F	B			C	A
Approach Delay					43.0			133.5			26.1	
Approach LOS					D			F			C	
Queue Length 50th (ft)				200	201	196	~328	293			252	69
Queue Length 95th (ft)				235	235	228	m#322	m236			151	0
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				550	551	605	253	1594			1215	748
Starvation Cap Reductn				0	0	0	0	0			131	95
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.83	0.83	0.90	1.90	0.78			0.94	0.65

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.90			
Intersection Signal Delay: 71.4		Intersection LOS: E	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



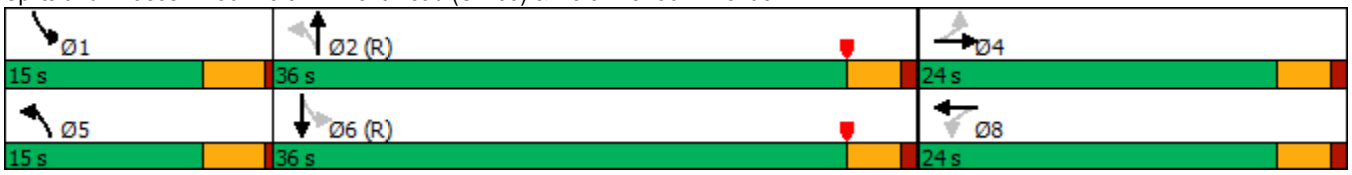
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	0	34	17	0	21	38	1527	11	23	1472	5
Future Volume (vph)	68	0	34	17	0	21	38	1527	11	23	1472	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.926			0.999			0.999	
Flt Protected		0.968			0.978		0.950			0.950		
Satd. Flow (prot)	0	1724	0	0	1671	0	1574	3290	0	1718	3261	0
Flt Permitted		0.774			0.881		0.081			0.085		
Satd. Flow (perm)	0	1379	0	0	1505	0	134	3290	0	154	3261	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		5.0			12.6			4.2			9.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	6%	0%	0%	9%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	114	0	0	42	0	42	1709	0	26	1642	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.7			11.7		56.5	53.3		55.7	50.5	
Actuated g/C Ratio		0.16			0.16		0.75	0.71		0.74	0.67	
v/c Ratio		0.41			0.14		0.14	0.73		0.08	0.75	
Control Delay		16.8			3.9		4.5	14.6		3.8	13.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.8			3.9		4.5	14.6		3.8	13.2	
LOS		B			A		A	B		A	B	
Approach Delay		16.8			3.9			14.3			13.1	
Approach LOS		B			A			B			B	
Queue Length 50th (ft)		17			0		4	163		2	227	
Queue Length 95th (ft)		57			12		14	#596		m6	#544	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		421			454		312	2336		344	2194	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.27			0.09		0.13	0.73		0.08	0.75	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 13.7 Intersection LOS: B
Intersection Capacity Utilization 58.1% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

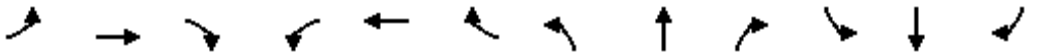
Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	0	34	17	0	21	38	1527	11	23	1472	5
Future Volume (veh/h)	68	0	34	17	0	21	38	1527	11	23	1472	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1811	1900	2057	1922	1682
Adj Flow Rate, veh/h	76	0	38	19	0	23	42	1697	12	26	1636	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	6	0	0	9	25
Cap, veh/h	199	16	68	145	25	121	415	2298	16	310	2367	9
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.66	0.66	0.11	1.00	1.00
Sat Flow, veh/h	930	129	529	584	194	941	1711	3502	25	1959	3732	14
Grp Volume(v), veh/h	114	0	0	42	0	0	42	833	876	26	800	842
Grp Sat Flow(s),veh/h/ln	1587	0	0	1719	0	0	1711	1721	1807	1959	1826	1920
Q Serve(g_s), s	3.3	0.0	0.0	0.0	0.0	0.0	0.5	24.2	24.3	0.3	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	0.0	1.6	0.0	0.0	0.5	24.2	24.3	0.3	0.0	0.0
Prop In Lane	0.67		0.33	0.45		0.55	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	283	0	0	290	0	0	415	1129	1185	310	1158	1217
V/C Ratio(X)	0.40	0.00	0.00	0.14	0.00	0.00	0.10	0.74	0.74	0.08	0.69	0.69
Avail Cap(c_a), veh/h	495	0	0	507	0	0	533	1129	1185	488	1158	1217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.2	0.0	0.0	3.2	8.6	8.6	6.9	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.0	0.8	0.0	0.0	0.4	4.3	4.2	0.4	3.4	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	0.0	0.0	1.3	0.0	0.0	0.3	13.0	13.4	0.2	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	0.0	0.0	30.0	0.0	0.0	3.6	12.9	12.8	7.3	3.4	3.2
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		114			42			1751			1668	
Approach Delay, s/veh		33.8			30.0			12.6			3.4	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	53.2		13.6	9.8	51.6		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	26.3		6.9	2.5	2.0		3.6				
Green Ext Time (p_c), s	0.0	5.5		1.0	0.1	26.6		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			9.2									
HCM 6th LOS			A									

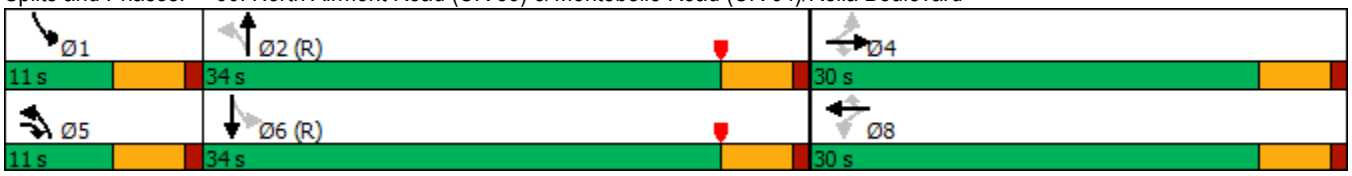


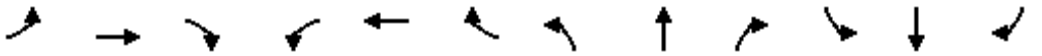
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	24	384	14	6	13	257	756	82	33	689	140
Future Volume (vph)	111	24	384	14	6	13	257	756	82	33	689	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.985			0.975	
Flt Protected		0.961		0.950			0.950			0.950		
Satd. Flow (prot)	0	1729	1433	1797	913	1242	1645	3229	0	1762	3419	0
Flt Permitted		0.760		0.636			0.160			0.307		
Satd. Flow (perm)	0	1367	1433	1203	913	1242	277	3229	0	569	3419	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78			102		18			37	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			10.2			11.1			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	150	427	16	7	14	286	931	0	37	922	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)		14.1	35.4	14.1	14.1	14.1	50.7	43.9		35.9	29.6	
Actuated g/C Ratio		0.19	0.47	0.19	0.19	0.19	0.68	0.59		0.48	0.39	
v/c Ratio		0.58	0.60	0.07	0.04	0.04	0.59	0.49		0.10	0.67	
Control Delay		36.5	15.8	23.4	23.0	0.2	20.5	7.1		6.7	20.9	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.5	15.8	23.4	23.0	0.2	20.5	7.1		6.7	20.9	
LOS		D	B	C	C	A	C	A		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		21.1			14.6			10.3			20.4	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)		65	111	6	3	0	68	78		5	174	
Queue Length 95th (ft)		111	198	20	12	0	#187	183		16	241	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		455	717	401	304	482	484	1896		375	1372	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.33	0.60	0.04	0.02	0.03	0.59	0.49		0.10	0.67	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 16.1		Intersection LOS: B	
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	24	384	14	6	13	257	756	82	33	689	140
Future Volume (veh/h)	111	24	384	14	6	13	257	756	82	33	689	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	123	27	427	16	7	14	286	840	91	37	766	156
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	383	74	541	317	194	455	367	1373	149	428	1315	268
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.16	0.92	0.92	0.04	0.42	0.42
Sat Flow, veh/h	969	242	1405	1070	635	1492	1717	2988	324	1919	3168	645
Grp Volume(v), veh/h	150	0	427	16	7	14	286	462	469	37	463	459
Grp Sat Flow(s),veh/h/ln	1211	0	1405	1070	635	1492	1717	1642	1670	1919	1914	1899
Q Serve(g_s), s	6.8	0.0	20.1	0.9	0.6	0.5	6.0	3.9	3.9	0.8	14.0	14.0
Cycle Q Clear(g_c), s	7.4	0.0	20.1	8.3	0.6	0.5	6.0	3.9	3.9	0.8	14.0	14.0
Prop In Lane	0.82		1.00	1.00		1.00	1.00		0.19	1.00		0.34
Lane Grp Cap(c), veh/h	456	0	541	317	194	455	367	754	767	428	795	788
V/C Ratio(X)	0.33	0.00	0.79	0.05	0.04	0.03	0.78	0.61	0.61	0.09	0.58	0.58
Avail Cap(c_a), veh/h	491	0	581	347	212	497	367	754	767	513	795	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	20.4	24.0	18.3	18.3	16.7	1.8	1.8	11.5	16.9	16.9
Incr Delay (d2), s/veh	0.4	0.0	6.8	0.1	0.1	0.0	9.5	3.4	3.3	0.1	3.1	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	0.0	11.5	0.4	0.2	0.3	5.9	2.4	2.4	0.6	10.5	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	27.2	24.0	18.4	18.3	26.2	5.2	5.1	11.6	20.0	20.0
LnGrp LOS	C	A	C	C	B	B	C	A	A	B	C	C
Approach Vol, veh/h		577			37			1217			959	
Approach Delay, s/veh		25.6			20.8			10.1			19.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	39.5		27.9	11.0	36.1		27.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	5.9		22.1	8.0	16.0		10.3				
Green Ext Time (p_c), s	0.0	3.5		0.7	0.0	3.0		0.1				

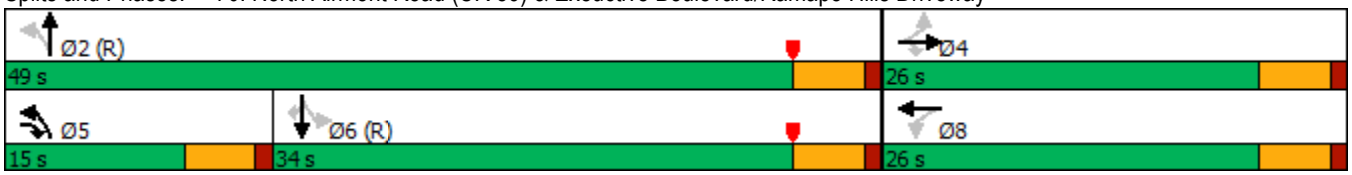
Intersection Summary												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

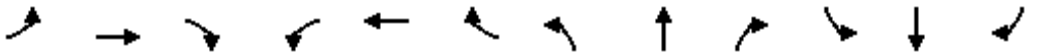
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	41	3	0	0	210	1068	21	1	1013	73
Future Volume (vph)	27	0	41	3	0	0	210	1068	21	1	1013	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor								1.00		1.00		
Frt			0.850					0.997				0.850
Flt Protected		0.950			0.950		0.950			0.950		
Satd. Flow (prot)	0	1589	1370	0	1805	0	1727	3333	0	1806	3492	1577
Flt Permitted							0.188			0.235		
Satd. Flow (perm)	0	1673	1370	0	1900	0	342	3333	0	447	3492	1577
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29					4				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	6%	0%	10%	0%	0%	0%	0%	7%	0%	0%	7%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	45	0	3	0	231	1197	0	1	1113	80
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	26.0	26.0	15.0	26.0	26.0		15.0	49.0		34.0	34.0	34.0
Total Split (%)	34.7%	34.7%	20.0%	34.7%	34.7%		20.0%	65.3%		45.3%	45.3%	45.3%
Maximum Green (s)	21.0	21.0	10.0	21.0	21.0		10.0	44.0		29.0	29.0	29.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		7.7	15.2		7.3		64.2	67.2		49.8	49.8	49.8
Actuated g/C Ratio		0.10	0.20		0.10		0.86	0.90		0.66	0.66	0.66
v/c Ratio		0.18	0.15		0.02		0.49	0.40		0.00	0.48	0.07
Control Delay		32.2	10.2		29.0		7.8	1.7		18.0	14.0	5.8
Queue Delay		0.0	0.0		0.0		0.3	0.0		0.0	0.9	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		32.2	10.2		29.0		8.1	1.7		18.0	14.9	5.8
LOS		C	B		C		A	A		B	B	A
Approach Delay		19.0			29.0			2.8			14.3	
Approach LOS		B			C			A			B	
Queue Length 50th (ft)		13	7		1		10	0		0	127	2
Queue Length 95th (ft)		36	22		9		m42	m97		m1	303	m13
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		468	339		532		506	2987		296	2316	1080
Starvation Cap Reductn		0	0		0		46	264		0	0	0
Spillback Cap Reductn		0	6		0		0	0		0	832	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.06	0.14		0.01		0.50	0.44		0.00	0.75	0.07

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 44 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 56.3%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	0	41	3	0	0	210	1068	21	1	1013	73
Future Volume (veh/h)	27	0	41	3	0	0	210	1068	21	1	1013	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1752	1900	1900	1900	1876	1773	1876	2175	2070	2085
Adj Flow Rate, veh/h	30	0	45	3	0	0	231	1174	23	1	1113	80
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	0	10	0	0	0	0	7	0	0	7	6
Cap, veh/h	174	0	179	180	0	0	497	2747	54	465	2672	1199
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.00	0.13	1.00	1.00	0.68	0.68	0.68
Sat Flow, veh/h	1451	0	1485	1576	0	0	1787	3379	66	544	3933	1766
Grp Volume(v), veh/h	30	0	45	3	0	0	231	585	612	1	1113	80
Grp Sat Flow(s),veh/h/ln	1451	0	1485	1576	0	0	1787	1684	1761	544	1967	1766
Q Serve(g_s), s	1.4	0.0	2.1	0.0	0.0	0.0	2.8	0.0	0.0	0.0	9.5	1.1
Cycle Q Clear(g_c), s	1.5	0.0	2.1	0.1	0.0	0.0	2.8	0.0	0.0	0.0	9.5	1.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	174	0	179	180	0	0	497	1369	1432	465	2672	1199
V/C Ratio(X)	0.17	0.00	0.25	0.02	0.00	0.00	0.46	0.43	0.43	0.00	0.42	0.07
Avail Cap(c_a), veh/h	500	0	515	506	0	0	615	1369	1432	465	2672	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.46	0.46	0.46	0.72	0.72	0.72
Uniform Delay (d), s/veh	34.3	0.0	29.9	33.6	0.0	0.0	3.5	0.0	0.0	3.9	5.4	4.0
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.0	0.0	0.0	0.3	0.5	0.4	0.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	1.4	0.1	0.0	0.0	0.9	0.3	0.3	0.0	5.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	30.6	33.7	0.0	0.0	3.8	0.5	0.4	3.9	5.7	4.1
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		75			3			1428			1194	
Approach Delay, s/veh		32.3			33.7			1.0			5.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		66.0		9.0	10.0	55.9		9.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		44.0		21.0	10.0	29.0		21.0				
Max Q Clear Time (g_c+I1), s		2.0		4.1	4.8	11.5		2.1				
Green Ext Time (p_c), s		5.1		0.2	0.3	5.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			3.9									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	11	537	17	10	634
Future Vol, veh/h	8	11	537	17	10	634
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	11	0	0	10
Mvmt Flow	13	17	852	27	16	1006

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1904	866	0	0	879	0
Stage 1	866	-	-	-	-	-
Stage 2	1038	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	178	431	-	-	777	-
Stage 1	610	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	170	431	-	-	777	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	610	-	-	-	-	-
Stage 2	520	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.5	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	262	777	-
HCM Lane V/C Ratio	-	-	0.115	0.02	-
HCM Control Delay (s)	-	-	20.5	9.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	731	22	79	831	24	149
Future Vol, veh/h	731	22	79	831	24	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	6	11	8	17	3
Mvmt Flow	761	23	82	866	25	155

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	784	0	1803	773
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	1030	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	796	-	119	433
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	406	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	796	-	107	433
Mov Cap-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	364	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	21.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	390	-	-	796	-
HCM Lane V/C Ratio	0.462	-	-	0.103	-
HCM Control Delay (s)	21.9	-	-	10	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	2.4	-	-	0.3	-

Intersection	
Int Delay, s/veh	137.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	146	235	353	74	2	95	1	192	2	2	0
Future Vol, veh/h	0	146	235	353	74	2	95	1	192	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	203	326	490	103	3	132	1	267	3	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	106	0	0	529	0	0	1452	1452	366	1585	1614	105
Stage 1	-	-	-	-	-	-	366	366	-	1085	1085	-
Stage 2	-	-	-	-	-	-	1086	1086	-	500	529	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1498	-	-	1008	-	-	142	182	685	106	126	961
Stage 1	-	-	-	-	-	-	687	679	-	299	333	-
Stage 2	-	-	-	-	-	-	319	375	-	588	563	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1498	-	-	1008	-	-	~ 82	88	685	38	61	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 82	88	-	38	61	-
Stage 1	-	-	-	-	-	-	687	679	-	299	161	-
Stage 2	-	-	-	-	-	-	151	181	-	358	563	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.8	$ 511.1	91.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	199	1498	-	-	1008	-	-	47
HCM Lane V/C Ratio	2.01	-	-	-	0.486	-	-	0.118
HCM Control Delay (s)	$ 511.1	0	-	-	11.9	0	-	91.6
HCM Lane LOS	F	A	-	-	B	A	-	F
HCM 95th %tile Q(veh)	30.1	0	-	-	2.7	-	-	0.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	19	0	0	12	22	1592	2	5	1481	34
Future Vol, veh/h	37	0	19	0	0	12	22	1592	2	5	1481	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	67	0	40	0	0	88	33	7	50	25	8	50
Mvmt Flow	39	0	20	0	0	13	23	1676	2	5	1559	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2471	3311	798	2513	3328	839	1595	0	0	1678	0	0
Stage 1	1587	1587	-	1723	1723	-	-	-	-	-	-	-
Stage 2	884	1724	-	790	1605	-	-	-	-	-	-	-
Critical Hdwy	9.24	6.9	7.9	7.5	6.5	8.66	4.76	-	-	4.6	-	-
Critical Hdwy Stg 1	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	8.24	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.17	4	3.7	3.5	4	4.18	2.53	-	-	2.45	-	-
Pot Cap-1 Maneuver	*86	0	*437	*103	0	*321	*640	-	-	*548	-	-
Stage 1	*50	142	-	*94	145	-	-	-	-	-	-	-
Stage 2	*182	120	-	*354	166	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*80	0	*437	*95	0	*321	*640	-	-	*548	-	-
Mov Cap-2 Maneuver	*80	0	-	*95	0	-	-	-	-	-	-	-
Stage 1	*48	141	-	*91	140	-	-	-	-	-	-	-
Stage 2	*169	116	-	*335	165	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	62	16.7	0.1	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 640	-	-	80	437	321	* 548	-	-
HCM Lane V/C Ratio	0.036	-	-	0.487	0.046	0.039	0.01	-	-
HCM Control Delay (s)	10.8	-	-	86.8	13.6	16.7	11.6	-	-
HCM Lane LOS	B	-	-	F	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2	0.1	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	2	10	0	0	0	11	257	57	50	560	5
Future Vol, veh/h	10	2	10	0	0	0	11	257	57	50	560	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	10	4	17	35	13	0
Mvmt Flow	15	3	15	0	0	0	17	389	86	76	848	8

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1470	1513	852	856	0	0	475	0	0
Stage 1	1004	1004	-	-	-	-	-	-	-
Stage 2	466	509	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.2	-	-	4.45	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.29	-	-	2.515	-	-
Pot Cap-1 Maneuver	142	121	362	751	-	-	935	-	-
Stage 1	357	322	-	-	-	-	-	-	-
Stage 2	636	541	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	116	0	362	751	-	-	935	-	-
Mov Cap-2 Maneuver	116	0	-	-	-	-	-	-	-
Stage 1	346	0	-	-	-	-	-	-	-
Stage 2	537	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.9	0.3	0.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	751	-	-	116	362	935	-	-
HCM Lane V/C Ratio	0.022	-	-	0.131	0.05	0.081	-	-
HCM Control Delay (s)	9.9	0	-	40.6	15.5	9.2	0	-
HCM Lane LOS	A	A	-	E	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	0.3	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	21	267	0	0	590
Future Vol, veh/h	25	21	267	0	0	590
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	70	47	6	0	0	10
Mvmt Flow	33	28	356	0	0	787

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1143	356	0	0	356	0
Stage 1	356	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Critical Hdwy	6.7	6.47	-	-	4.1	-
Critical Hdwy Stg 1	5.7	-	-	-	-	-
Critical Hdwy Stg 2	5.7	-	-	-	-	-
Follow-up Hdwy	4.13	3.723	-	-	2.2	-
Pot Cap-1 Maneuver	186	610	-	-	1214	-
Stage 1	604	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	186	610	-	-	1214	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	381	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	272	1214	-
HCM Lane V/C Ratio	-	-	0.225	-	-
HCM Control Delay (s)	-	-	22	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	318	22	9	385	44	48
Future Vol, veh/h	318	22	9	385	44	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	9	15	50	14	5	16
Mvmt Flow	468	32	13	566	65	71

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	500	0	1076	484
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	592	-
Critical Hdwy	-	-	4.6	-	7.25	6.76
Critical Hdwy Stg 1	-	-	-	-	6.25	-
Critical Hdwy Stg 2	-	-	-	-	6.25	-
Follow-up Hdwy	-	-	2.65	-	3.545	3.444
Pot Cap-1 Maneuver	-	-	857	-	189	526
Stage 1	-	-	-	-	551	-
Stage 2	-	-	-	-	479	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	857	-	185	526
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	551	-
Stage 2	-	-	-	-	468	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	29.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	280	-	-	857	-
HCM Lane V/C Ratio	0.483	-	-	0.015	-
HCM Control Delay (s)	29.3	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.5	-	-	0	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	295	71	69	354	40	37
Future Vol, veh/h	295	71	69	354	40	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	18	5	18	16	21
Mvmt Flow	343	83	80	412	47	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	426	0	957	385
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	572	-
Critical Hdwy	-	-	4.15	-	5.36	5.81
Critical Hdwy Stg 1	-	-	-	-	4.36	-
Critical Hdwy Stg 2	-	-	-	-	4.36	-
Follow-up Hdwy	-	-	2.245	-	3.644	3.489
Pot Cap-1 Maneuver	-	-	1117	-	371	664
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	651	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1117	-	336	664
Mov Cap-2 Maneuver	-	-	-	-	336	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	590	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	15.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	441	-	-	1117	-
HCM Lane V/C Ratio	0.203	-	-	0.072	-
HCM Control Delay (s)	15.2	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	89	34	598	552	11
Future Vol, veh/h	44	89	34	598	552	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	4	-	-	2	-2	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	34	59	5	6	0
Mvmt Flow	52	106	40	712	657	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1456	664	670	0	-	0
Stage 1	664	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Critical Hdwy	7.2	6.94	4.69	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.606	2.731	-	-	-
Pot Cap-1 Maneuver	105	380	702	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	99	380	702	-	-	-
Mov Cap-2 Maneuver	99	-	-	-	-	-
Stage 1	420	-	-	-	-	-
Stage 2	377	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	72.6	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	702	-	196	-	-
HCM Lane V/C Ratio	0.058	-	0.808	-	-
HCM Control Delay (s)	10.4	-	72.6	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	5.7	-	-

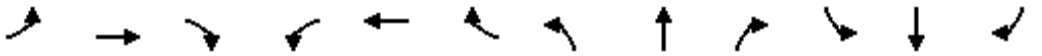
Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	88	102	25	534	644	22
Future Vol, veh/h	88	102	25	534	644	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	8	10	0
Mvmt Flow	101	117	29	614	740	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1425	753	765	0	-	0
Stage 1	753	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Critical Hdwy	6.2	6.1	4.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	163	422	857	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	155	422	857	-	-	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	531	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	86	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	857	-	235	-	-
HCM Lane V/C Ratio	0.034	-	0.929	-	-
HCM Control Delay (s)	9.3	0	86	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.1	-	8.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	603	110	89	697	143	177	184	109	296	224	244
Future Volume (vph)	235	603	110	89	697	143	177	184	109	296	224	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.944			0.922	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1631	1766	1516	1752	1810	1429	1919	1726	0	1730	1733	0
Flt Permitted	0.104			0.151			0.253			0.248		
Satd. Flow (perm)	179	1766	1516	279	1810	1429	511	1726	0	451	1733	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		25			46	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	4%	3%	3%	5%	13%	5%	5%	4%	10%	6%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	242	622	113	92	719	147	182	302	0	305	483	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.8	39.1	53.4	41.1	34.7	49.3	24.6	15.8		25.1	16.1	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.53	0.26	0.17		0.27	0.17	

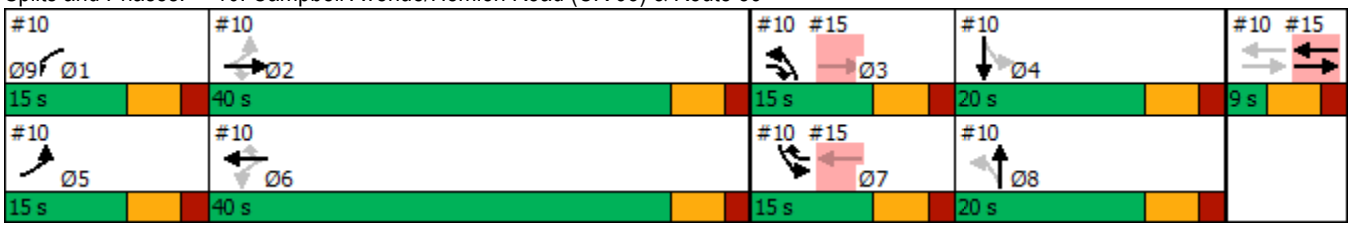
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.07	0.85	0.12	0.40	1.07	0.18	0.69	0.97		1.25	1.44	
Control Delay	104.2	39.1	1.0	18.4	86.7	2.5	39.0	81.4		168.9	244.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	104.2	39.1	1.0	18.4	86.7	2.5	39.0	81.4		168.9	244.0	
LOS	F	D	A	B	F	A	D	F		F	F	
Approach Delay		50.8			67.2			65.4			214.9	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	~104	320	0	24	~451	0	77	~175		~175	~374	
Queue Length 95th (ft)	#334	#635	10	68	#828	28	#152	#306		#363	#581	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	227	736	938	270	669	829	271	311		244	335	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.07	0.85	0.12	0.34	1.07	0.18	0.67	0.97		1.25	1.44	

Intersection Summary

Area Type: Other
Cycle Length: 99
Actuated Cycle Length: 93.8
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.44
Intersection Signal Delay: 98.2 Intersection LOS: F
Intersection Capacity Utilization 106.2% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

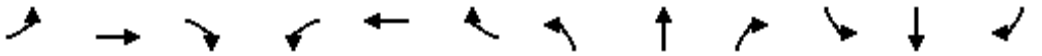
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	576	444	73	139	380	533	61	474	160	432	614	638
Future Volume (vph)	576	444	73	139	380	533	61	474	160	432	614	638
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1692	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1436
Flt Permitted	0.102			0.308			0.100			0.184		
Satd. Flow (perm)	182	1808	1424	592	1828	1398	171	3279	0	329	1739	1436
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					22				239
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	8%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	594	458	75	143	392	549	63	654	0	445	633	658
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	69.4	58.3	56.4	45.9	39.8	64.4	43.9	40.2		75.3	66.6	96.7
Actuated g/C Ratio	0.43	0.36	0.35	0.28	0.25	0.40	0.27	0.25		0.46	0.41	0.60

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

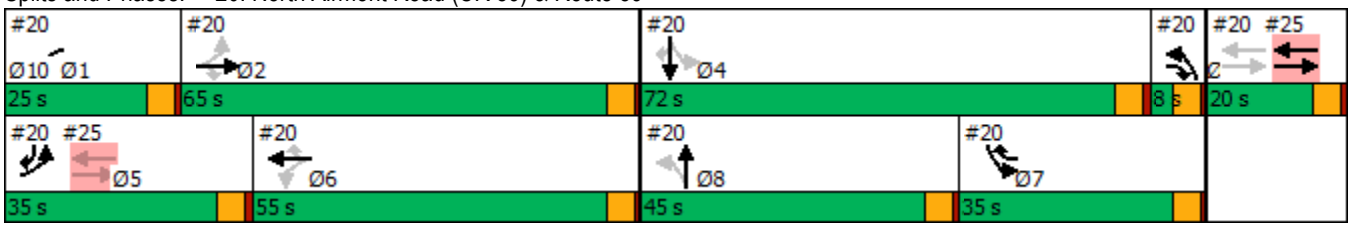
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.66	0.71	0.13	0.56	0.88	0.99	0.80	0.79		1.09	0.89	0.69
Control Delay	341.3	48.5	2.2	41.0	72.9	63.7	103.3	63.9		123.5	60.9	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	8.6	0.0
Total Delay	341.3	48.5	2.2	41.0	72.9	63.7	103.3	63.9		123.5	69.5	12.5
LOS	F	D	A	D	E	E	F	E		F	E	B
Approach Delay		199.8			64.0			67.4			61.7	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	~832	404	0	85	395	277	36	325		~411	598	213
Queue Length 95th (ft)	#1249	438	14	161	362	#629	#129	#480		#769	#1000	311
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	358	733	560	351	628	554	79	828		408	721	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	69	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.66	0.62	0.13	0.41	0.62	0.99	0.80	0.79		1.09	0.97	0.69

Intersection Summary			
Area Type:	Other		
Cycle Length: 190			
Actuated Cycle Length: 162.2			
Natural Cycle: 150			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.66			
Intersection Signal Delay: 96.5		Intersection LOS: F	
Intersection Capacity Utilization 118.3%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

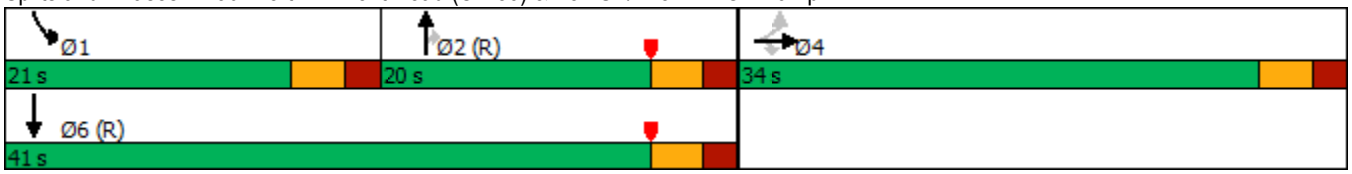
HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	289	3	351	0	0	0	0	843	822	487	1346	0
Future Volume (vph)	289	3	351	0	0	0	0	843	822	487	1346	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1445	0	0	0	0	3154	1616	3485	3524	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1445	0	0	0	0	3154	1594	3482	3524	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						467			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	9%	0%	0%	0%	0%	9%	5%	3%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	295	355	0	0	0	0	852	830	492	1360	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		19.5	19.5					26.2	26.2	14.2	45.5	
Actuated g/C Ratio		0.26	0.26					0.35	0.35	0.19	0.61	
v/c Ratio		0.73	0.79					0.77	0.96	0.74	0.64	
Control Delay		35.3	30.1					25.1	29.5	28.5	5.0	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		35.3	30.1					25.1	29.5	28.5	5.2	
LOS		D	C					C	C	C	A	
Approach Delay		32.5						27.3			11.4	
Approach LOS		C						C			B	
Queue Length 50th (ft)		126	111					110	57	81	0	
Queue Length 95th (ft)		175	174					m#359	m#442	m137	m241	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	621					1102	861	743	2135	
Starvation Cap Reductn		0	0					0	0	0	140	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.49	0.57					0.77	0.96	0.66	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 132.6%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	3	351	0	0	0	0	843	822	487	1346	0
Future Volume (veh/h)	289	3	351	0	0	0	0	843	822	487	1346	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1619				0	1714	1844	2052	2022	0
Adj Flow Rate, veh/h	292	3	355				0	852	0	492	1360	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	9				0	9	5	3	5	0
Cap, veh/h	479	5	397				0	1135		613	2216	0
Arrive On Green	0.29	0.29	0.29				0.00	0.70	0.00	0.11	0.39	0.00
Sat Flow, veh/h	1653	17	1372				0	3342	1563	3791	3942	0
Grp Volume(v), veh/h	295	0	355				0	852	0	492	1360	0
Grp Sat Flow(s),veh/h/ln	1670	0	1372				0	1628	1563	1895	1921	0
Q Serve(g_s), s	11.4	0.0	18.6				0.0	12.5	0.0	9.5	21.4	0.0
Cycle Q Clear(g_c), s	11.4	0.0	18.6				0.0	12.5	0.0	9.5	21.4	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	484	0	397				0	1135		613	2216	0
V/C Ratio(X)	0.61	0.00	0.89				0.00	0.75		0.80	0.61	0.00
Avail Cap(c_a), veh/h	646	0	531				0	1135		809	2216	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.18	0.18	0.00
Uniform Delay (d), s/veh	23.0	0.0	25.5				0.0	9.3	0.0	32.3	16.3	0.0
Incr Delay (d2), s/veh	0.5	0.0	11.9				0.0	4.6	0.0	0.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.7	0.0	11.4				0.0	5.6	0.0	5.9	11.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	0.0	37.4				0.0	13.9	0.0	32.9	16.5	0.0
LnGrp LOS	C	A	D				A	B		C	B	A
Approach Vol, veh/h		650						852			1852	
Approach Delay, s/veh		31.1						13.9			20.9	
Approach LOS		C						B			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.1	31.2		26.7		48.3
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	11.5	0.0		20.6		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

Intersection Summary		
HCM 6th Ctrl Delay		21.1
HCM 6th LOS		C

Notes

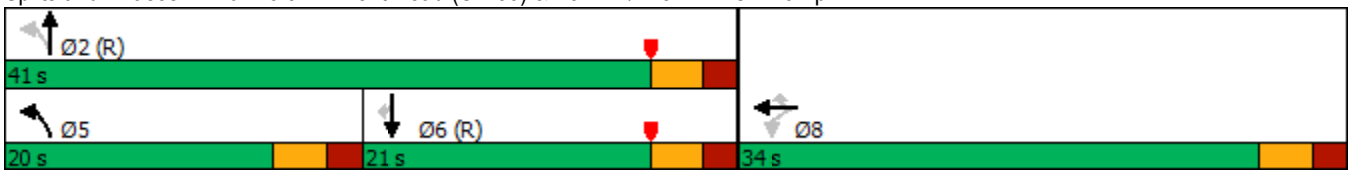
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	852	2	494	417	715	0	0	981	508
Future Volume (vph)	0	0	0	852	2	494	417	715	0	0	981	508
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1649	1654	1583	1449	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.158					
Satd. Flow (perm)	0	0	0	1649	1654	1583	241	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						147						396
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	4%	3%	2%	15%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	434	437	504	426	730	0	0	1001	518
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.7	24.7	24.7	40.3	40.3			20.3	20.3
Actuated g/C Ratio				0.33	0.33	0.33	0.54	0.54			0.27	0.27
v/c Ratio				0.80	0.80	0.81	1.15	0.44			1.03	0.74
Control Delay				34.3	34.5	26.9	104.5	4.4			67.3	23.9
Queue Delay				0.0	0.0	0.4	0.0	0.0			27.1	1.0

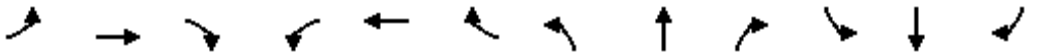
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.3	34.5	27.4	104.5	4.4			94.4	24.9
LOS				C	C	C	F	A			F	C
Approach Delay					31.8			41.3			70.7	
Approach LOS					C			D			E	
Queue Length 50th (ft)				186	187	148	~196	35			~295	137
Queue Length 95th (ft)				278	282	252	m#310	19			#460	#294
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				637	639	702	371	1647			973	696
Starvation Cap Reductn				0	0	0	0	0			84	48
Spillback Cap Reductn				0	0	30	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.68	0.68	0.75	1.15	0.44			1.13	0.80

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 49.1		Intersection LOS: D	
Intersection Capacity Utilization 132.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



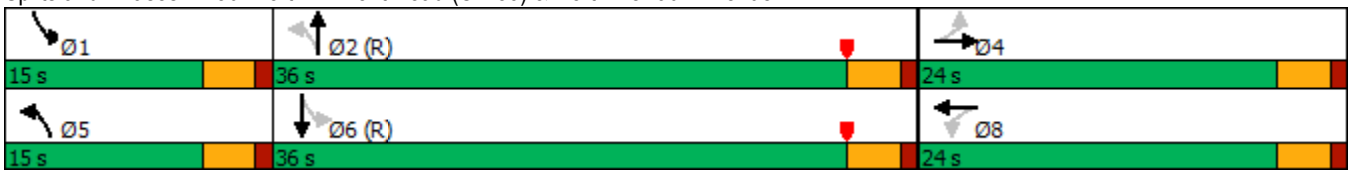
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	2	32	60	2	63	41	1472	70	68	1592	12
Future Volume (vph)	68	2	32	60	2	63	41	1472	70	68	1592	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.993			0.999	
Flt Protected		0.968			0.976		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1844	0	1589	3278	0	1718	3388	0
Flt Permitted		0.701			0.818		0.091			0.087		
Satd. Flow (perm)	0	1292	0	0	1545	0	152	3278	0	157	3388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			66			8			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			427	
Travel Time (s)		4.1			10.5			4.2			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	6%	0%	0%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	135	0	45	1676	0	74	1743	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		12.9			12.9		53.6	46.4		54.7	49.3	
Actuated g/C Ratio		0.17			0.17		0.71	0.62		0.73	0.66	
v/c Ratio		0.45			0.42		0.15	0.83		0.23	0.78	
Control Delay		26.2			18.8		5.0	21.4		9.2	15.7	

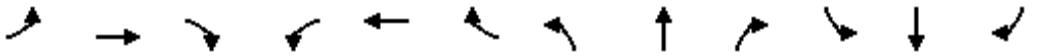
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.2			18.8		5.0	21.4		9.2	15.7	
LOS		C			B		A	C		A	B	
Approach Delay		26.2			18.8			21.0			15.4	
Approach LOS		C			B			C			B	
Queue Length 50th (ft)		34			28		5	354		8	191	
Queue Length 95th (ft)		75			71		15	#605		m29	#604	
Internal Link Dist (ft)		102			382			105			347	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		366			460		320	2030		344	2227	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.30			0.29		0.14	0.83		0.22	0.78	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 18.4 Intersection LOS: B
Intersection Capacity Utilization 71.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue

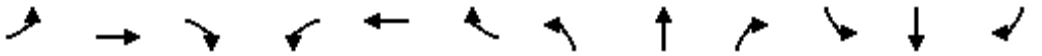




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	2	32	60	2	63	41	1472	70	68	1592	12
Future Volume (veh/h)	68	2	32	60	2	63	41	1472	70	68	1592	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1811	1900	2057	1982	2057
Adj Flow Rate, veh/h	74	2	35	65	2	68	45	1600	76	74	1730	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	6	0	0	5	0
Cap, veh/h	211	21	70	162	21	113	353	2016	95	378	2400	18
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.14	0.83	0.83
Sat Flow, veh/h	991	155	528	685	158	855	1725	3345	158	1959	3831	29
Grp Volume(v), veh/h	111	0	0	135	0	0	45	820	856	74	850	893
Grp Sat Flow(s),veh/h/ln	1674	0	0	1697	0	0	1725	1721	1783	1959	1883	1977
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.6	27.1	27.5	0.8	14.1	14.2
Cycle Q Clear(g_c), s	4.2	0.0	0.0	5.2	0.0	0.0	0.6	27.1	27.5	0.8	14.1	14.2
Prop In Lane	0.67		0.32	0.48		0.50	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	302	0	0	296	0	0	353	1037	1074	378	1179	1238
V/C Ratio(X)	0.37	0.00	0.00	0.46	0.00	0.00	0.13	0.79	0.80	0.20	0.72	0.72
Avail Cap(c_a), veh/h	502	0	0	505	0	0	466	1037	1074	460	1179	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	30.4	0.0	0.0	5.1	11.3	11.4	9.4	3.5	3.5
Incr Delay (d2), s/veh	2.7	0.0	0.0	3.9	0.0	0.0	0.6	6.2	6.2	0.9	3.8	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	0.0	4.6	0.0	0.0	0.4	15.5	16.1	1.0	6.4	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	0.0	34.4	0.0	0.0	5.7	17.5	17.6	10.3	7.3	7.2
LnGrp LOS	C	A	A	C	A	A	A	B	B	B	A	A
Approach Vol, veh/h		111			135			1721			1817	
Approach Delay, s/veh		32.7			34.4			17.2			7.4	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	49.2		13.9	10.1	51.0		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	29.5		6.2	2.6	16.2		7.2				
Green Ext Time (p_c), s	0.2	2.4		0.9	0.1	15.0		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		13.6	
HCM 6th LOS		B	

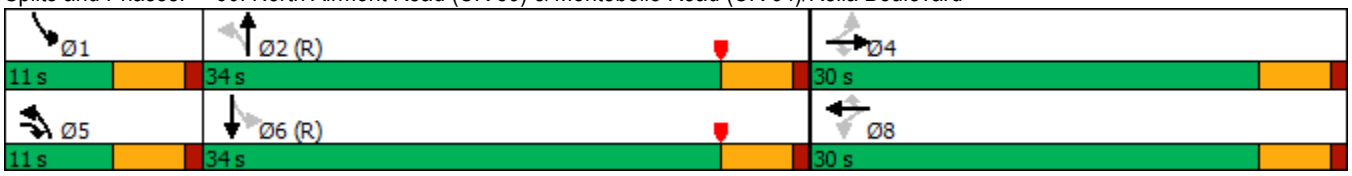


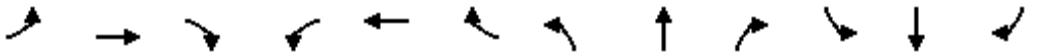
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	9	307	94	35	74	318	826	49	36	982	135
Future Volume (vph)	177	9	307	94	35	74	318	826	49	36	982	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.992			0.982	
Flt Protected		0.954		0.950			0.950			0.950		
Satd. Flow (prot)	0	1663	1433	1762	1723	1553	1710	3355	0	1745	3541	0
Flt Permitted		0.709		0.560			0.121			0.310		
Satd. Flow (perm)	0	1236	1433	1039	1723	1553	218	3355	0	570	3541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			102		9			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			490			587	
Travel Time (s)		15.5			12.2			11.1			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	195	323	99	37	78	335	921	0	38	1176	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		17.2	36.9	17.2	17.2	17.2	46.6	40.8		34.3	28.1	
Actuated g/C Ratio		0.23	0.49	0.23	0.23	0.23	0.62	0.54		0.46	0.37	
v/c Ratio		0.69	0.45	0.42	0.09	0.18	0.78	0.50		0.11	0.88	
Control Delay		38.2	14.0	28.3	20.7	3.8	37.6	13.8		8.0	30.3	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		38.2	14.0	28.3	20.7	3.8	37.6	13.8		8.0	30.3	
LOS		D	B	C	C	A	D	B		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		23.1			18.0			20.2			29.6	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)		83	86	39	14	0	90	148		6	252	
Queue Length 95th (ft)		134	151	73	31	19	#336	204		20	#348	
Internal Link Dist (ft)		602			368			410			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		412	719	346	574	585	427	1830		360	1383	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.47	0.45	0.29	0.06	0.13	0.78	0.50		0.11	0.85	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 24.1		Intersection LOS: C	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	9	307	94	35	74	318	826	49	36	982	135
Future Volume (veh/h)	177	9	307	94	35	74	318	826	49	36	982	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	186	9	323	99	37	78	335	869	52	38	1034	142
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	370	13	457	550	501	444	356	1688	101	388	1631	224
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.08	0.52	0.52	0.04	0.47	0.47
Sat Flow, veh/h	1127	55	1405	1583	2046	1810	1773	3256	195	1904	3434	471
Grp Volume(v), veh/h	195	0	323	99	37	78	335	453	468	38	585	591
Grp Sat Flow(s),veh/h/ln	1182	0	1405	1583	2046	1810	1773	1698	1752	1904	1944	1961
Q Serve(g_s), s	10.6	0.0	15.1	0.0	1.0	2.5	6.0	13.1	13.1	0.7	16.9	17.0
Cycle Q Clear(g_c), s	11.7	0.0	15.1	2.9	1.0	2.5	6.0	13.1	13.1	0.7	16.9	17.0
Prop In Lane	0.95		1.00	1.00		1.00	1.00		0.11	1.00		0.24
Lane Grp Cap(c), veh/h	383	0	457	550	501	444	356	880	909	388	923	931
V/C Ratio(X)	0.51	0.00	0.71	0.18	0.07	0.18	0.94	0.51	0.51	0.10	0.63	0.63
Avail Cap(c_a), veh/h	494	0	581	689	682	603	356	880	909	471	923	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	22.2	22.5	21.8	22.3	17.8	11.9	11.9	9.8	14.8	14.8
Incr Delay (d2), s/veh	1.0	0.0	2.8	0.2	0.1	0.2	30.8	1.9	1.9	0.1	3.3	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.7	0.0	8.9	2.5	0.9	2.0	9.9	8.3	8.5	0.5	12.1	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	0.0	25.0	22.6	21.8	22.5	48.5	13.8	13.7	9.9	18.1	18.1
LnGrp LOS	C	A	C	C	C	C	D	B	B	A	B	B
Approach Vol, veh/h		518			214			1256			1214	
Approach Delay, s/veh		25.9			22.5			23.0			17.8	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	43.9		23.4	11.0	40.6		23.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.7	15.1		17.1	8.0	19.0		4.9				
Green Ext Time (p_c), s	0.0	3.0		1.3	0.0	3.5		0.6				

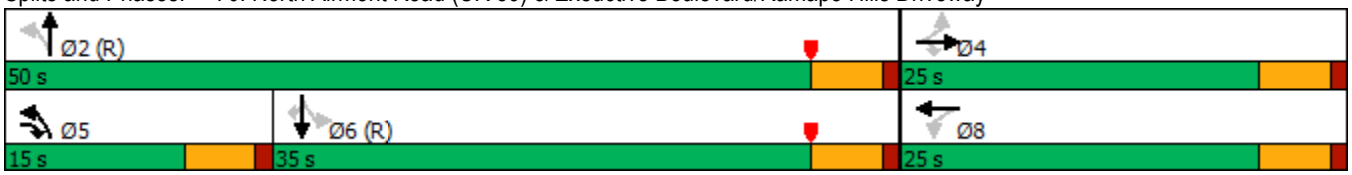
Intersection Summary			
HCM 6th Ctrl Delay		21.5	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	0	138	16	0	4	80	1110	19	5	1335	43
Future Volume (vph)	79	0	138	16	0	4	80	1110	19	5	1335	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	12	11	11	12	12
Grade (%)		0%			0%			2%			-7%	
Storage Length (ft)	0		0	0		0	100		0	60		150
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor							1.00	1.00		1.00		0.98
Frt			0.850		0.974			0.997				0.850
Flt Protected		0.950			0.961		0.950			0.950		
Satd. Flow (prot)	0	1604	1507	0	1778	0	1661	3427	0	1806	3593	1623
Flt Permitted		0.744			0.741		0.108			0.240		
Satd. Flow (perm)	0	1257	1507	0	1371	0	189	3427	0	456	3593	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29		102			4				102
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		228			210			290			490	
Travel Time (s)		6.2			5.7			6.6			11.1	
Confl. Peds. (#/hr)							1		1	1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%	4%	4%	0%	0%	4%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	82	144	0	21	0	83	1176	0	5	1391	45
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	5	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	50.0		35.0	35.0	35.0
Total Split (%)	33.3%	33.3%	20.0%	33.3%	33.3%		20.0%	66.7%		46.7%	46.7%	46.7%
Maximum Green (s)	20.0	20.0	10.0	20.0	20.0		10.0	45.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Lead/Lag			Lead				Lead			Lag	Lag	Lag
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		C-Max	C-Max	C-Max
Act Effct Green (s)		10.5	20.3		10.5		56.7	57.7		44.7	44.7	44.7
Actuated g/C Ratio		0.14	0.27		0.14		0.76	0.77		0.60	0.60	0.60
v/c Ratio		0.47	0.34		0.08		0.30	0.45		0.02	0.65	0.05
Control Delay		37.3	17.1		0.6		9.2	6.5		4.4	7.0	0.3
Queue Delay		0.0	2.0		0.2		0.0	0.5		0.0	1.6	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.3	19.1		0.8		9.2	6.9		4.4	8.6	0.3
LOS		D	B		A		A	A		A	A	A
Approach Delay		25.7			0.8			7.1			8.3	
Approach LOS		C			A			A			A	
Queue Length 50th (ft)		36	40		0		10	84		0	33	0
Queue Length 95th (ft)		72	74		0		m35	191		m1	379	m0
Internal Link Dist (ft)		148			130			210			410	
Turn Bay Length (ft)							100			60		150
Base Capacity (vph)		335	488		440		339	2636		271	2139	987
Starvation Cap Reductn		0	0		0		0	902		0	0	0
Spillback Cap Reductn		0	225		221		0	0		0	529	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		0.24	0.55		0.10		0.24	0.68		0.02	0.86	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 8 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 62.1%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 70: North Airmont Road (CR 89) & Exeuctive Boulevard/Ramapo Hills Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	0	138	16	0	4	80	1110	19	5	1335	43
Future Volume (veh/h)	79	0	138	16	0	4	80	1110	19	5	1335	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1900	1900	1900	1900	1817	1817	1876	2175	2115	2130
Adj Flow Rate, veh/h	82	0	144	17	0	4	83	1156	20	5	1391	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	0	0	0	4	4	0	0	4	3
Cap, veh/h	279	0	274	165	9	21	348	2609	45	445	2532	1136
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.07	1.00	1.00	0.63	0.63	0.63
Sat Flow, veh/h	1591	0	1610	678	81	179	1731	3473	60	555	4019	1804
Grp Volume(v), veh/h	82	0	144	21	0	0	83	575	601	5	1391	45
Grp Sat Flow(s),veh/h/ln	1591	0	1610	937	0	0	1731	1726	1806	555	2010	1804
Q Serve(g_s), s	0.0	0.0	6.1	0.5	0.0	0.0	1.1	0.0	0.0	0.3	14.7	0.7
Cycle Q Clear(g_c), s	3.1	0.0	6.1	3.6	0.0	0.0	1.1	0.0	0.0	0.3	14.7	0.7
Prop In Lane	1.00		1.00	0.81		0.19	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	279	0	274	195	0	0	348	1297	1357	445	2532	1136
V/C Ratio(X)	0.29	0.00	0.53	0.11	0.00	0.00	0.24	0.44	0.44	0.01	0.55	0.04
Avail Cap(c_a), veh/h	497	0	518	394	0	0	484	1297	1357	445	2532	1136
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.77	0.77	0.77	0.56	0.56	0.56
Uniform Delay (d), s/veh	30.8	0.0	28.4	30.7	0.0	0.0	5.6	0.0	0.0	5.2	7.9	5.3
Incr Delay (d2), s/veh	0.6	0.0	1.6	0.2	0.0	0.0	0.3	0.8	0.8	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	4.4	0.7	0.0	0.0	0.5	0.6	0.6	0.0	8.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.3	0.0	29.9	30.9	0.0	0.0	5.8	0.9	0.8	5.2	8.3	5.3
LnGrp LOS	C	A	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		226			21			1259			1441	
Approach Delay, s/veh		30.4			30.9			1.2			8.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		61.4		13.6	9.1	52.2		13.6				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		45.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s		2.0		8.1	3.1	16.7		5.6				
Green Ext Time (p_c), s		4.9		0.6	0.1	5.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			7.1									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	19	613	9	5	636
Future Vol, veh/h	30	19	613	9	5	636
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	7	0	0	10
Mvmt Flow	36	23	739	11	6	766

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1523	745	0	0	750	0
Stage 1	745	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	259	492	-	-	868	-
Stage 1	658	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	256	492	-	-	868	-
Mov Cap-2 Maneuver	256	-	-	-	-	-
Stage 1	658	-	-	-	-	-
Stage 2	637	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	314	868	-
HCM Lane V/C Ratio	-	-	0.188	0.007	-
HCM Control Delay (s)	-	-	19.1	9.2	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	975	33	178	901	28	118
Future Vol, veh/h	975	33	178	901	28	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	7	6	6	0	7
Mvmt Flow	1037	35	189	959	30	126

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1072	0	2392	1055
Stage 1	-	-	-	-	1055	-
Stage 2	-	-	-	-	1337	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	635	-	64	301
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	333	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	635	-	45	301
Mov Cap-2 Maneuver	-	-	-	-	156	-
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	234	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	38.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	255	-	-	635	-
HCM Lane V/C Ratio	0.609	-	-	0.298	-
HCM Control Delay (s)	38.9	-	-	13.1	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	3.6	-	-	1.2	-

Intersection	
Int Delay, s/veh	80.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	81	142	223	157	6	198	9	337	3	4	3
Future Vol, veh/h	0	81	142	223	157	6	198	9	337	3	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	91	160	251	176	7	222	10	379	3	4	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	183	0	0	251	0	0	856	856	171	1048	933	180
Stage 1	-	-	-	-	-	-	171	171	-	682	682	-
Stage 2	-	-	-	-	-	-	685	685	-	366	251	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1404	-	-	1286	-	-	333	360	879	233	270	877
Stage 1	-	-	-	-	-	-	858	790	-	478	449	-
Stage 2	-	-	-	-	-	-	506	526	-	685	677	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1404	-	-	1286	-	-	272	282	879	108	211	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	272	282	-	108	211	-
Stage 1	-	-	-	-	-	-	858	790	-	478	352	-
Stage 2	-	-	-	-	-	-	390	412	-	385	677	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.9	168.4	24.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	476	1404	-	-	1286	-	-	199
HCM Lane V/C Ratio	1.284	-	-	-	0.195	-	-	0.056
HCM Control Delay (s)	168.4	0	-	-	8.5	0	-	24.2
HCM Lane LOS	F	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	25.8	0	-	-	0.7	-	-	0.2

Intersection	
Int Delay, s/veh	10.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	0	46	0	0	16	17	1584	2	3	1626	68
Future Vol, veh/h	65	0	46	0	0	16	17	1584	2	3	1626	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	290	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	22	0	12	0	0	31	17	7	50	100	5	34
Mvmt Flow	71	0	51	0	0	18	19	1741	2	3	1787	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2740	3612	931	2680	3648	872	1862	0	0	1743	0	0
Stage 1	1831	1831	-	1780	1780	-	-	-	-	-	-	-
Stage 2	909	1781	-	900	1868	-	-	-	-	-	-	-
Critical Hdwy	8.34	6.9	7.34	7.5	6.5	7.52	4.44	-	-	6.1	-	-
Critical Hdwy Stg 1	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.34	5.9	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.72	4	3.42	3.5	4	3.61	2.37	-	-	3.2	-	-
Pot Cap-1 Maneuver	~ 47	0	*392	*103	0	*372	*566	-	-	*419	-	-
Stage 1	~ 52	105	-	*87	136	-	-	-	-	-	-	-
Stage 2	234	112	-	*304	123	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1	1	1	-	-	1	-	-
Mov Cap-1 Maneuver	~ 43	0	*392	*87	0	*372	*566	-	-	*419	-	-
Mov Cap-2 Maneuver	~ 43	0	-	*87	0	-	-	-	-	-	-	-
Stage 1	~ 50	104	-	*84	131	-	-	-	-	-	-	-
Stage 2	215	108	-	*263	122	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 315.9	15.2	0.1	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 566	-	-	43	392	372	* 419	-	-
HCM Lane V/C Ratio	0.033	-	-	1.661	0.129	0.047	0.008	-	-
HCM Control Delay (s)	11.6	-	-	-$ 528.5	15.5	15.2	13.7	-	-
HCM Lane LOS	B	-	-	F	C	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	7.2	0.4	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	2	6	0	0	0	12	483	28	30	355	15
Future Vol, veh/h	24	2	6	0	0	0	12	483	28	30	355	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	4	-	-	-2	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	7	18	5	0
Mvmt Flow	28	2	7	0	0	0	14	562	33	35	413	17

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1099	1115	422	430	0	0	595	0	0
Stage 1	492	492	-	-	-	-	-	-	-
Stage 2	607	623	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	4.28	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	2.362	-	-
Pot Cap-1 Maneuver	237	210	636	1140	-	-	907	-	-
Stage 1	619	551	-	-	-	-	-	-	-
Stage 2	548	481	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	221	0	636	1140	-	-	907	-	-
Mov Cap-2 Maneuver	221	0	-	-	-	-	-	-	-
Stage 1	608	0	-	-	-	-	-	-	-
Stage 2	520	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.4	0.2	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1140	-	-	221	636	907	-	-
HCM Lane V/C Ratio	0.012	-	-	0.126	0.015	0.038	-	-
HCM Control Delay (s)	8.2	0	-	23.6	10.7	9.1	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	37	507	0	0	369
Future Vol, veh/h	31	37	507	0	0	369
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-2	-	2	-	-	-4
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	18	6	0	0	7
Mvmt Flow	35	42	576	0	0	419

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	995	576	0	0	576	0
Stage 1	576	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Critical Hdwy	6	6.18	-	-	4.1	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	-	-	2.2	-
Pot Cap-1 Maneuver	306	504	-	-	1007	-
Stage 1	604	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	306	504	-	-	1007	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	389	1007	-
HCM Lane V/C Ratio	-	-	0.199	-	-
HCM Control Delay (s)	-	-	16.5	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	397	24	25	347	39	23
Future Vol, veh/h	397	24	25	347	39	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	2	4	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	8	5	0	4	0	0
Mvmt Flow	446	27	28	390	44	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	473	0	906	460
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	446	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1099	-	253	575
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1099	-	245	575
Mov Cap-2 Maneuver	-	-	-	-	245	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	569	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	311	-	-	1099	-
HCM Lane V/C Ratio	0.224	-	-	0.026	-
HCM Control Delay (s)	19.9	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

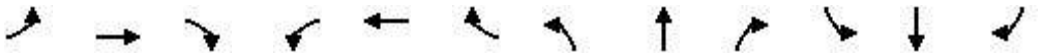
Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	395	25	17	323	49	55
Future Vol, veh/h	395	25	17	323	49	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-8	-	-	0	-6	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	7	4	31	5	13	4
Mvmt Flow	449	28	19	367	56	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	477	0	868	463
Stage 1	-	-	-	-	463	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	-	-	4.41	-	5.33	5.64
Critical Hdwy Stg 1	-	-	-	-	4.33	-
Critical Hdwy Stg 2	-	-	-	-	4.33	-
Follow-up Hdwy	-	-	2.479	-	3.617	3.336
Pot Cap-1 Maneuver	-	-	950	-	413	643
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	744	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	950	-	403	643
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	725	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	502	-	-	950	-
HCM Lane V/C Ratio	0.235	-	-	0.02	-
HCM Control Delay (s)	14.4	-	-	8.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	508	48	134	532	189	130	234	62	183	207	171
Future Volume (vph)	243	508	48	134	532	189	130	234	62	183	207	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		0	1		1	1		0	2		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	1.00					0.97		1.00		1.00	0.99	
Frt		0.987				0.850		0.968			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1662	3269	0	1752	1727	1429	1901	1751	0	3102	1742	0
Flt Permitted	0.950			0.365			0.117			0.950		
Satd. Flow (perm)	1658	3269	0	673	1727	1392	234	1751	0	3090	1742	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				222		8			28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	5%	5%	9%	3%	10%	13%	6%	5%	11%	19%	6%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	296	679	0	163	649	230	159	361	0	223	461	0
Turn Type	Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases		9		6	9	6	8					
Detector Phase	5	2		1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0		9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	28.0	61.0		16.0	49.0	23.0	16.0	41.0		23.0	48.0	
Total Split (%)	18.7%	40.7%		10.7%	32.7%	15.3%	10.7%	27.3%		15.3%	32.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	None	None	None		None	None	
Act Effct Green (s)	22.1	56.9		52.7	44.3	57.3	43.9	34.1		14.1	38.3	
Actuated g/C Ratio	0.16	0.40		0.37	0.31	0.41	0.31	0.24		0.10	0.27	
v/c Ratio	1.14	0.51		0.50	1.20	0.33	0.84	0.84		0.72	0.93	
Control Delay	150.7	33.0		28.9	146.9	4.8	68.3	68.6		75.7	74.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	150.7	33.0		28.9	146.9	4.8	68.3	68.6		75.7	74.1	
LOS	F	C		C	F	A	E	E		E	E	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	

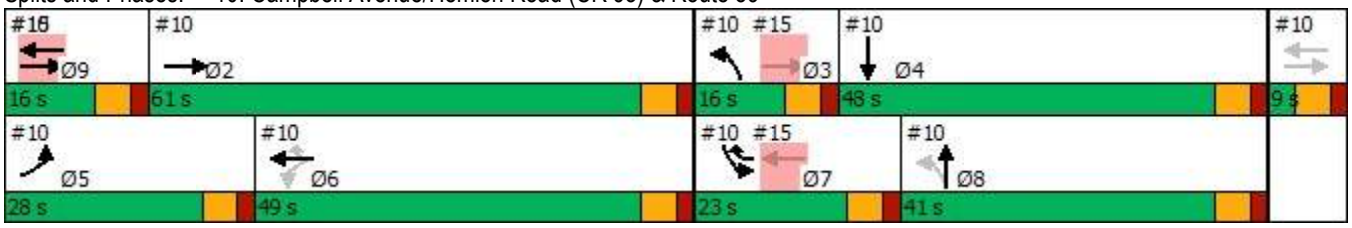
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		68.8			97.0			68.5			74.6	
Approach LOS		E			F			E			E	
Queue Length 50th (ft)	~317	247		80	~734	4	93	301		103	379	
Queue Length 95th (ft)	#477	255		126	#826	38	#192	#427		140	#519	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75			180		560	150			145		
Base Capacity (vph)	260	1323		330	542	726	191	448		375	540	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.14	0.51		0.49	1.20	0.32	0.83	0.81		0.59	0.85	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 140.9			
Natural Cycle: 150			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 79.1		Intersection LOS: E	
Intersection Capacity Utilization 90.1%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	512	349	19	87	277	478	48	586	118	477	461	585
Future Volume (vph)	512	349	19	87	277	478	48	586	118	477	461	585
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.992				0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3345	1692	0	1811	1761	1299	1555	3343	0	1656	1627	1396
Flt Permitted	0.950			0.318			0.105			0.146		
Satd. Flow (perm)	3345	1692	0	606	1761	1299	172	3343	0	254	1627	1396
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		2						11				392
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	6%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	522	375	0	89	283	488	49	718	0	487	470	597
Turn Type	Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8		7	4	5
Permitted Phases		10		6	10	6	8			4		4
Detector Phase	5	2		1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0		3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0		8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	27.0	71.0		19.0	63.0	46.0	17.0	43.0		46.0	72.0	27.0
Total Split (%)	14.2%	37.4%		10.0%	33.2%	24.2%	8.9%	22.6%		24.2%	37.9%	14.2%
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	Max	Max	Max		Max	None	None
Act Effct Green (s)	22.1	43.6		36.8	30.3	69.2	71.4	38.2		81.4	46.1	68.2
Actuated g/C Ratio	0.14	0.28		0.24	0.20	0.45	0.46	0.25		0.53	0.30	0.44
v/c Ratio	1.09	0.78		0.42	0.82	0.83	0.13	0.86		0.95	0.96	0.71
Control Delay	125.9	61.6		40.9	74.9	33.6	35.3	66.0		79.6	85.0	10.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.1	0.0
Total Delay	125.9	61.6		40.9	74.9	33.6	35.3	66.0		79.6	85.1	10.4
LOS	F	E		D	E	C	D	E		E	F	B
Approach Delay		99.0			47.9			64.1			54.7	
Approach LOS		F			D			E			D	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	11.0
Total Split (%)	6%
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

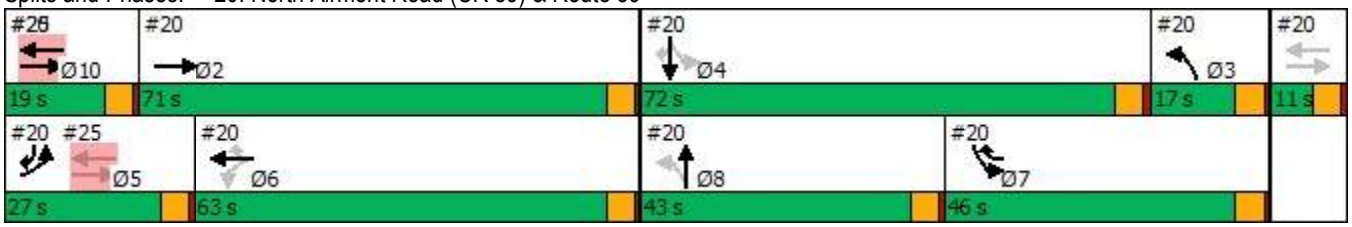
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	~290	338		57	269	228	21	349		387	~470	71
Queue Length 95th (ft)	#485	396		108	285	315	54	#541		#748	597	149
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330			175		170	140			100		
Base Capacity (vph)	480	755		276	693	585	378	838		510	712	837
Starvation Cap Reductn	0	0		0	0	0	0	0		0	12	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.09	0.50		0.32	0.41	0.83	0.13	0.86		0.95	0.67	0.71

Intersection Summary			
Area Type:	Other		
Cycle Length: 190			
Actuated Cycle Length: 153.7			
Natural Cycle: 130			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 64.8		Intersection LOS: E	
Intersection Capacity Utilization 92.2%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

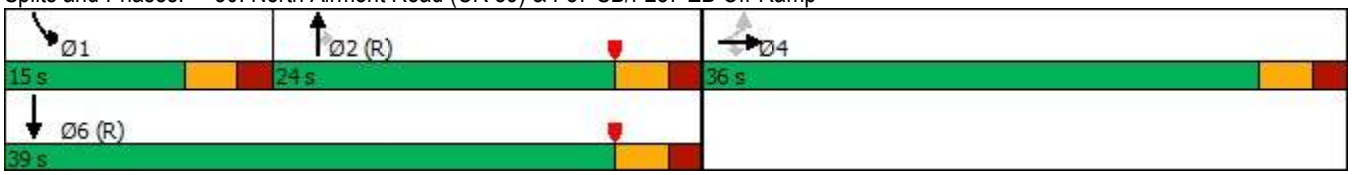
HCM 6th Edition methodology does not support clustered intersections.

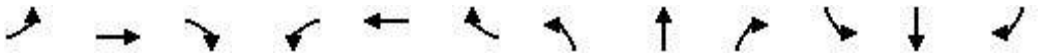
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	6	529	0	0	0	0	890	751	418	991	0
Future Volume (vph)	364	6	529	0	0	0	0	890	751	418	991	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3015	1616	3519	3458	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3015	1616	3519	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						433			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	14%	5%	2%	7%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	374	534	0	0	0	0	899	759	422	1001	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					24.0	24.0	15.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					32.0%	32.0%	20.0%	52.0%	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		28.3	28.3					21.7	21.7	10.0	36.7	
Actuated g/C Ratio		0.38	0.38					0.29	0.29	0.13	0.49	
v/c Ratio		0.64	0.93					1.03	0.98	0.90	0.59	
Control Delay		24.1	42.7					61.2	36.8	46.9	9.9	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		24.1	42.7					61.2	36.8	46.9	9.9	
LOS		C	D					E	D	D	A	
Approach Delay		35.0						50.0			20.9	
Approach LOS		D						D			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		130	181					~270	~240	88	97	
Queue Length 95th (ft)		215	#373					#373	#407	m#104	m168	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					872	775	469	1692	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.58	0.86					1.03	0.98	0.90	0.59	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 36.2		Intersection LOS: D	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	6	529	0	0	0	0	890	751	418	991	0
Future Volume (veh/h)	364	6	529	0	0	0	0	890	751	418	991	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1640	1844	2067	1992	0
Adj Flow Rate, veh/h	368	6	534				0	899	0	422	1001	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	14	5	2	7	0
Cap, veh/h	605	10	531				0	789		509	1715	0
Arrive On Green	0.41	0.41	0.41				0.00	0.51	0.00	0.04	0.15	0.00
Sat Flow, veh/h	1463	24	1284				0	3197	1563	3818	3884	0
Grp Volume(v), veh/h	374	0	534				0	899	0	422	1001	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1558	1563	1909	1892	0
Q Serve(g_s), s	14.8	0.0	31.0				0.0	19.0	0.0	8.2	18.5	0.0
Cycle Q Clear(g_c), s	14.8	0.0	31.0				0.0	19.0	0.0	8.2	18.5	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	615	0	531				0	789		509	1715	0
V/C Ratio(X)	0.61	0.00	1.01				0.00	1.14		0.83	0.58	0.00
Avail Cap(c_a), veh/h	615	0	531				0	789		509	1715	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.26	0.26	0.00
Uniform Delay (d), s/veh	17.2	0.0	22.0				0.0	18.5	0.0	35.0	25.3	0.0
Incr Delay (d2), s/veh	1.3	0.0	40.5				0.0	77.7	0.0	2.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	0.0	20.7				0.0	19.6	0.0	5.9	11.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	0.0	62.5				0.0	96.2	0.0	37.9	25.7	0.0
LnGrp LOS	B	A	F				A	F		D	C	A
Approach Vol, veh/h		908						899	A		1423	
Approach Delay, s/veh		44.4						96.2			29.3	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	24.0		36.0		39.0
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	10.0	19.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	10.2	0.0		33.0		0.0
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.2
HCM 6th LOS	D

Notes

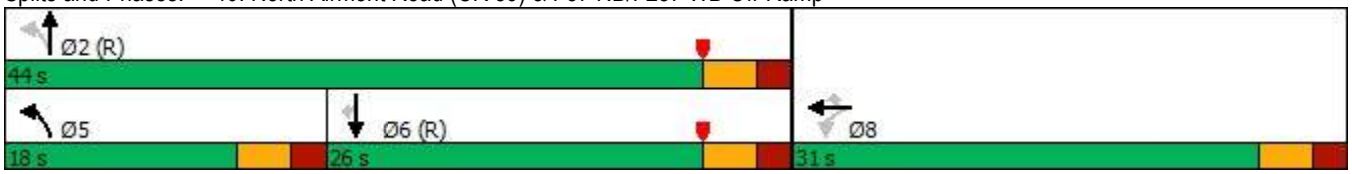
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	664	1	396	351	903	0	0	745	312
Future Volume (vph)	0	0	0	664	1	396	351	903	0	0	745	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1588	1591	1553	1333	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.148					
Satd. Flow (perm)	0	0	0	1588	1591	1553	208	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						102						350
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	8%	0%	4%	25%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	455	456	542	481	1237	0	0	1021	427
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	18.0	44.0			26.0	26.0
Total Split (%)				41.3%	41.3%	41.3%	24.0%	58.7%			34.7%	34.7%
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.9	24.9	24.9	40.1	40.1			22.1	22.1
Actuated g/C Ratio				0.33	0.33	0.33	0.53	0.53			0.29	0.29
v/c Ratio				0.87	0.87	0.93	1.57	0.78			0.95	0.62
Control Delay				41.9	41.9	44.8	287.9	17.6			44.9	9.7
Queue Delay				0.0	0.0	0.0	0.0	0.0			17.5	0.7
Total Delay				41.9	41.9	44.8	287.9	17.6			62.3	10.4
LOS				D	D	D	F	B			E	B

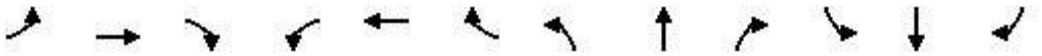
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					43.0			93.3			47.0	
Approach LOS					D			F			D	
Queue Length 50th (ft)				200	201	196	~292	293			~262	74
Queue Length 95th (ft)				235	235	228	m#313	256			207	21
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				550	551	605	306	1594			1070	689
Starvation Cap Reductn				0	0	0	0	0			82	72
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.83	0.83	0.90	1.57	0.78			1.03	0.69

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.57			
Intersection Signal Delay: 63.0		Intersection LOS: E	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



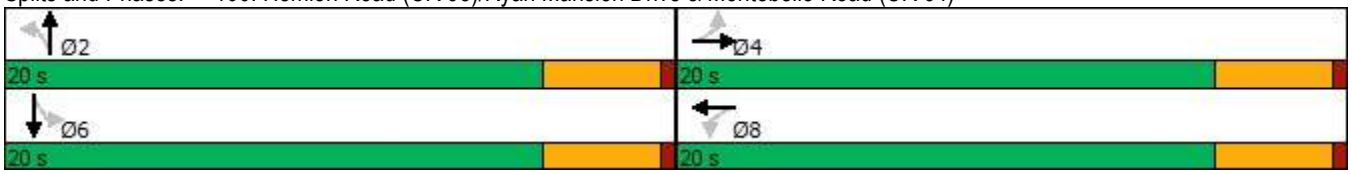
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	146	235	353	74	2	95	1	192	2	2	0
Future Volume (vph)	0	146	235	353	74	2	95	1	192	2	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	16	16	16
Grade (%)		6%			-2%			-4%			-2%	
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.917			0.999			0.910				
Flt Protected				0.950	0.968			0.984			0.976	
Satd. Flow (prot)	0	1503	0	1550	1584	0	0	1498	0	0	2123	0
Flt Permitted				0.369	0.439			0.888			0.875	
Satd. Flow (perm)	0	1503	0	602	718	0	0	1352	0	0	1903	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		241			1			267				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		262			178			279			265	
Travel Time (s)		6.0			4.0			6.3			6.0	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles (%)	0%	5%	11%	8%	7%	0%	12%	0%	12%	0%	0%	0%
Shared Lane Traffic (%)				42%								
Lane Group Flow (vph)	0	529	0	284	312	0	0	400	0	0	6	0
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		16.2		16.2	16.2			9.8			9.8	
Actuated g/C Ratio		0.48		0.48	0.48			0.29			0.29	
v/c Ratio		0.63		0.99	0.91			0.69			0.01	
Control Delay		9.6		73.5	50.6			10.7			7.5	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		9.6		73.5	50.6			10.7			7.5	
LOS		A		E	D			B			A	
Approach Delay		9.6			61.5			10.7			7.5	
Approach LOS		A			E			B			A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		28		44	44			18			1	
Queue Length 95th (ft)		69		#144	#150			38			4	
Internal Link Dist (ft)		182			98			199			185	
Turn Bay Length (ft)				100								
Base Capacity (vph)		841		286	342			783			905	
Starvation Cap Reductn		0		0	0			0			0	
Spillback Cap Reductn		0		0	0			0			0	
Storage Cap Reductn		0		0	0			0			0	
Reduced v/c Ratio		0.63		0.99	0.91			0.51			0.01	

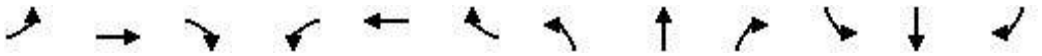
Intersection Summary			
Area Type:	Other		
Cycle Length: 40			
Actuated Cycle Length: 34.1			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 30.1		Intersection LOS: C	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64)



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	603	110	89	697	143	177	184	109	296	224	244
Future Volume (vph)	235	603	110	89	697	143	177	184	109	296	224	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		0	1		1	1		0	2		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor								0.99				
Frt		0.977				0.850		0.944			0.922	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1631	3283	0	1752	1810	1429	1919	1731	0	3355	1733	0
Flt Permitted	0.073			0.344			0.148			0.221		
Satd. Flow (perm)	125	3283	0	635	1810	1429	299	1731	0	781	1733	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19				164		18			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	4%	3%	3%	5%	13%	5%	5%	4%	10%	6%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	242	735	0	92	719	147	182	302	0	305	483	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases	2	9		6	9	6	8			4		
Detector Phase	5	2		1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0		9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	23.0	66.0		12.0	55.0	27.0	19.0	26.0		27.0	34.0	
Total Split (%)	16.4%	47.1%		8.6%	39.3%	19.3%	13.6%	18.6%		19.3%	24.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	Min		None	Min	None	None	None		None	None	
Act Effct Green (s)	72.1	60.7		55.0	49.6	68.4	39.2	27.0		41.6	28.2	
Actuated g/C Ratio	0.55	0.46		0.42	0.38	0.52	0.30	0.20		0.31	0.21	
v/c Ratio	0.92	0.48		0.29	1.06	0.18	0.77	0.82		0.60	1.22	
Control Delay	75.7	25.5		19.5	90.8	2.3	54.7	66.4		36.5	159.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	75.7	25.5		19.5	90.8	2.3	54.7	66.4		36.5	159.2	
LOS	E	C		B	F	A	D	E		D	F	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	

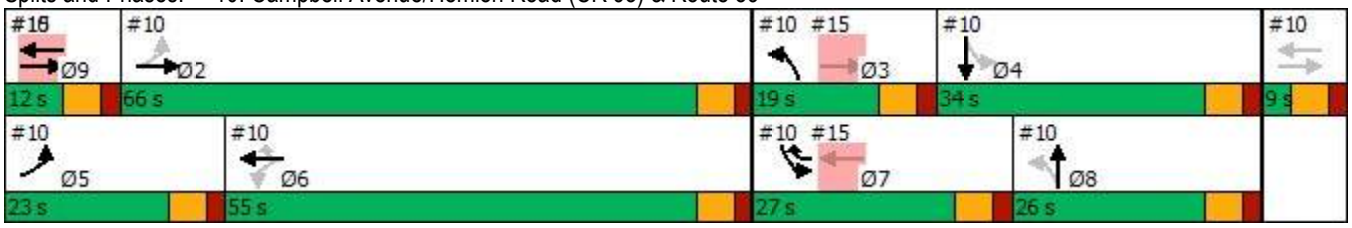
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		37.9			70.4			62.0			111.7	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	157	218		36	~671	0	109	231		93	~479	
Queue Length 95th (ft)	#357	265		75	#921	27	#237	#457		143	#753	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75			180		560	150			145		
Base Capacity (vph)	262	1517		315	679	891	250	368		683	397	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.92	0.48		0.29	1.06	0.16	0.73	0.82		0.45	1.22	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 132.2			
Natural Cycle: 140			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.22			
Intersection Signal Delay: 69.4		Intersection LOS: E	
Intersection Capacity Utilization 106.2%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	576	444	73	139	380	533	61	474	160	432	614	638
Future Volume (vph)	576	444	73	139	380	533	61	474	160	432	614	638
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.99		1.00		
Frt		0.979				0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3283	1759	0	1829	1828	1398	1626	3279	0	1703	1739	1436
Flt Permitted	0.950			0.133			0.100			0.138		
Satd. Flow (perm)	3283	1759	0	256	1828	1398	171	3279	0	247	1739	1436
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5						22				177
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	8%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	594	533	0	143	392	549	63	654	0	445	633	658
Turn Type	Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8		7	4	5
Permitted Phases		10		6	10	6	8			4		4
Detector Phase	5	2		1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0		3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0		8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	39.0	62.0		19.0	42.0	53.0	17.0	45.0		53.0	81.0	39.0
Total Split (%)	20.5%	32.6%		10.0%	22.1%	27.9%	8.9%	23.7%		27.9%	42.6%	20.5%
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	Max	Max	Max		Max	None	None
Act Effct Green (s)	34.0	60.8		49.6	39.3	85.1	58.8	40.0		93.1	69.3	103.3
Actuated g/C Ratio	0.19	0.33		0.27	0.21	0.46	0.32	0.22		0.51	0.38	0.56
v/c Ratio	0.98	0.91		0.81	1.00	0.85	0.31	0.89		0.88	0.96	0.74
Control Delay	103.6	77.9		74.8	113.5	37.6	54.9	82.6		78.0	82.5	16.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	18.0	0.2
Total Delay	103.6	77.9		74.8	113.5	37.6	54.9	82.6		78.0	100.5	16.7
LOS	F	E		E	F	D	D	F		E	F	B

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	11.0
Total Split (%)	6%
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	

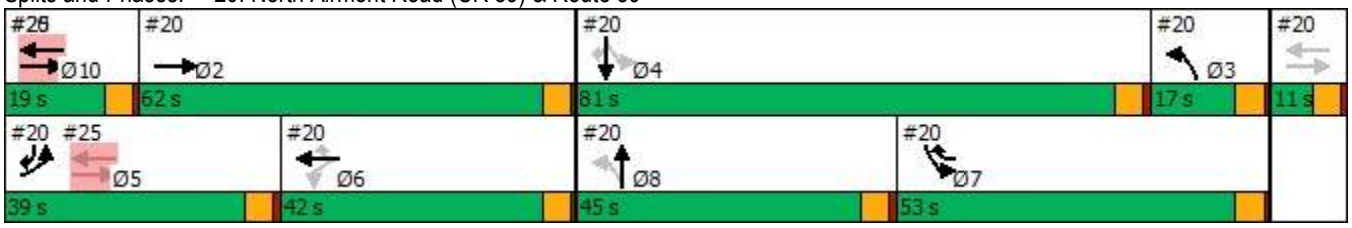
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		91.4			70.0			80.2			63.0	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	360	610		105	~494	276	36	383		419	704	240
Queue Length 95th (ft)	#530	#737		#227	#616	#497	79	#531		#678	#993	335
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330			175		170	140			100		
Base Capacity (vph)	609	586		191	391	648	203	732		506	721	885
Starvation Cap Reductn	0	0		0	0	0	0	0		0	96	19
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.98	0.91		0.75	1.00	0.85	0.31	0.89		0.88	1.01	0.76

Intersection Summary			
Area Type:	Other		
Cycle Length: 190			
Actuated Cycle Length: 183.4			
Natural Cycle: 150			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 74.1		Intersection LOS: E	
Intersection Capacity Utilization 102.9%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

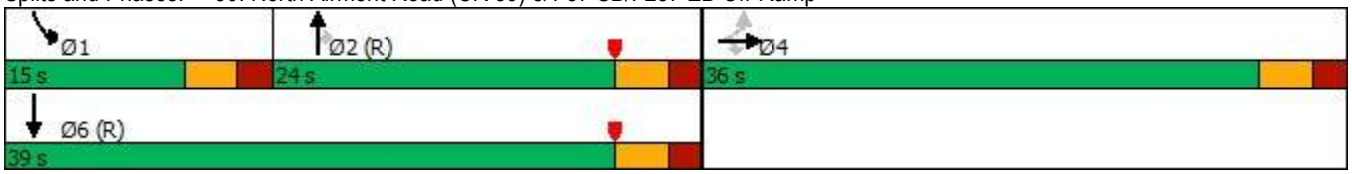
HCM 6th Edition methodology does not support clustered intersections.

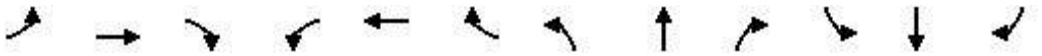
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	289	3	351	0	0	0	0	843	822	487	1346	0
Future Volume (vph)	289	3	351	0	0	0	0	843	822	487	1346	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1445	0	0	0	0	3154	1616	3485	3524	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1445	0	0	0	0	3154	1595	3481	3524	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						500			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			204			505	
Travel Time (s)		21.5			9.1			4.6			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	9%	0%	0%	0%	0%	9%	5%	3%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	295	355	0	0	0	0	852	830	492	1360	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					24.0	24.0	15.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					32.0%	32.0%	20.0%	52.0%	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		19.7	19.7					30.3	30.3	10.0	45.3	
Actuated g/C Ratio		0.26	0.26					0.40	0.40	0.13	0.60	
v/c Ratio		0.72	0.78					0.67	0.88	1.06	0.64	
Control Delay		34.8	29.6					18.4	16.0	76.6	4.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	
Total Delay		34.8	29.6					18.4	16.0	76.6	4.6	
LOS		C	C					B	B	E	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		32.0						17.2			23.8	
Approach LOS		C						B			C	
Queue Length 50th (ft)		126	111					71	51	~112	0	
Queue Length 95th (ft)		173	172					m#294	m#392	m#174	m226	
Internal Link Dist (ft)		866			320			124			425	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		641	657					1274	942	464	2128	
Starvation Cap Reductn		0	0					0	0	0	139	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.46	0.54					0.67	0.88	1.06	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 22.4		Intersection LOS: C	
Intersection Capacity Utilization 132.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	3	351	0	0	0	0	843	822	487	1346	0
Future Volume (veh/h)	289	3	351	0	0	0	0	843	822	487	1346	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1619				0	1714	1844	2052	2022	0
Adj Flow Rate, veh/h	292	3	355				0	852	0	492	1360	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	9				0	9	5	3	5	0
Cap, veh/h	481	5	399				0	1224		505	2212	0
Arrive On Green	0.29	0.29	0.29				0.00	0.75	0.00	0.13	0.58	0.00
Sat Flow, veh/h	1653	17	1372				0	3342	1563	3791	3942	0
Grp Volume(v), veh/h	295	0	355				0	852	0	492	1360	0
Grp Sat Flow(s),veh/h/ln	1670	0	1372				0	1628	1563	1895	1921	0
Q Serve(g_s), s	11.4	0.0	18.6				0.0	10.2	0.0	9.7	17.4	0.0
Cycle Q Clear(g_c), s	11.4	0.0	18.6				0.0	10.2	0.0	9.7	17.4	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	485	0	399				0	1224		505	2212	0
V/C Ratio(X)	0.61	0.00	0.89				0.00	0.70		0.97	0.61	0.00
Avail Cap(c_a), veh/h	690	0	567				0	1224		505	2212	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.16	0.16	0.00
Uniform Delay (d), s/veh	22.9	0.0	25.5				0.0	7.1	0.0	32.4	10.4	0.0
Incr Delay (d2), s/veh	0.5	0.0	9.5				0.0	3.3	0.0	10.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.7	0.0	11.0				0.0	4.5	0.0	6.5	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	0.0	35.0				0.0	10.4	0.0	42.9	10.6	0.0
LnGrp LOS	C	A	C				A	B		D	B	A
Approach Vol, veh/h		650						852	A		1852	
Approach Delay, s/veh		29.7						10.4			19.2	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	33.2		26.8		48.2
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	10.0	19.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	11.7	0.0		20.6		0.0
Green Ext Time (p_c), s	0.0	0.0		1.2		0.0

Intersection Summary		
HCM 6th Ctrl Delay		19.0
HCM 6th LOS		B

Notes

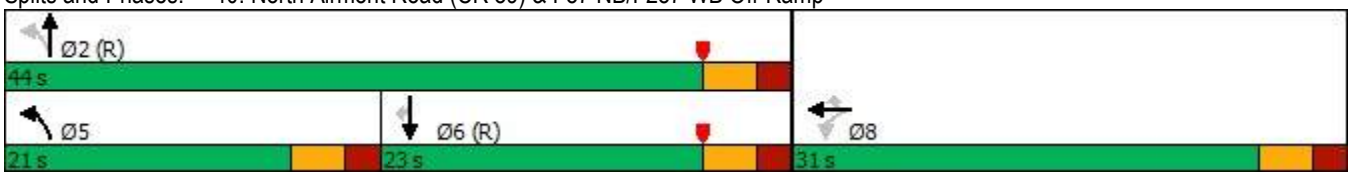
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	852	2	494	417	715	0	0	981	508
Future Volume (vph)	0	0	0	852	2	494	417	715	0	0	981	508
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1649	1654	1583	1449	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.157					
Satd. Flow (perm)	0	0	0	1649	1654	1583	239	3064	0	0	3593	1507
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						173						410
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			505			290	
Travel Time (s)		13.2			19.2			11.5			6.6	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	4%	3%	2%	15%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	434	437	504	426	730	0	0	1001	518
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	21.0	44.0			23.0	23.0
Total Split (%)				41.3%	41.3%	41.3%	28.0%	58.7%			30.7%	30.7%
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				23.6	23.6	23.6	41.4	41.4			20.4	20.4
Actuated g/C Ratio				0.31	0.31	0.31	0.55	0.55			0.27	0.27
v/c Ratio				0.84	0.84	0.82	1.10	0.43			1.03	0.73
Control Delay				39.1	39.3	27.1	86.4	5.3			66.0	22.3
Queue Delay				0.1	0.1	0.0	0.0	0.0			27.8	0.9
Total Delay				39.2	39.5	27.1	86.4	5.3			93.8	23.2
LOS				D	D	C	F	A			F	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					34.9			35.2			69.7	
Approach LOS					C			D			E	
Queue Length 50th (ft)				185	187	135	~191	95			~310	134
Queue Length 95th (ft)				#330	#333	#290	#341	19			#434	#270
Internal Link Dist (ft)		500			766			425			210	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				571	573	661	389	1689			975	707
Starvation Cap Reductn				0	0	0	0	0			83	48
Spillback Cap Reductn				5	5	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.77	0.77	0.76	1.10	0.43			1.12	0.79

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 48.0		Intersection LOS: D	
Intersection Capacity Utilization 132.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

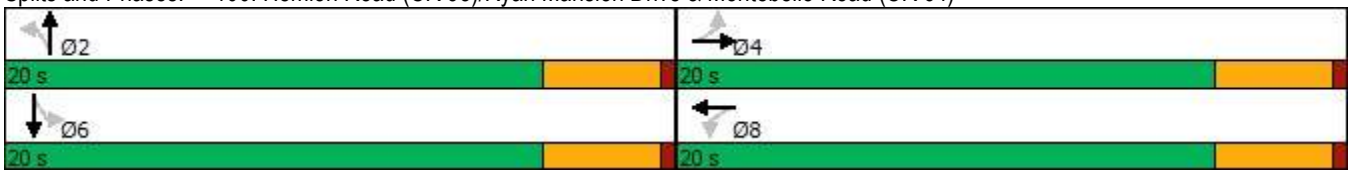
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	81	142	223	157	6	198	9	337	3	4	3
Future Volume (vph)	0	81	142	223	157	6	198	9	337	3	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	16	16	16
Grade (%)		6%			-2%			-4%			-2%	
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.914			0.995			0.916			0.959	
Flt Protected				0.950	0.990			0.982			0.985	
Satd. Flow (prot)	0	1519	0	1565	1606	0	0	1602	0	0	1868	0
Flt Permitted				0.595	0.885			0.878			0.899	
Satd. Flow (perm)	0	1519	0	980	1436	0	0	1433	0	0	1705	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		160			5			245			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		262			178			279			265	
Travel Time (s)		6.0			4.0			6.3			6.0	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	11%	5%	7%	8%	17%	4%	0%	6%	0%	25%	0%
Shared Lane Traffic (%)				19%								
Lane Group Flow (vph)	0	251	0	203	231	0	0	611	0	0	10	0
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)		11.5		11.7	11.7			18.7			18.7	
Actuated g/C Ratio		0.33		0.34	0.34			0.54			0.54	
v/c Ratio		0.41		0.62	0.48			0.69			0.01	
Control Delay		5.9		18.8	12.6			13.6			6.4	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay		5.9		18.8	12.6			13.6			6.4	
LOS		A		B	B			B			A	
Approach Delay		5.9			15.5			13.6			6.4	
Approach LOS		A			B			B			A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		12		33	35			49			1	
Queue Length 95th (ft)		44		81	76			#228			7	
Internal Link Dist (ft)		182			98			199			185	
Turn Bay Length (ft)				100								
Base Capacity (vph)		806		466	685			896			935	
Starvation Cap Reductn		0		0	0			0			0	
Spillback Cap Reductn		0		0	0			0			0	
Storage Cap Reductn		0		0	0			0			0	
Reduced v/c Ratio		0.31		0.44	0.34			0.68			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 40			
Actuated Cycle Length: 34.7			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 72.3%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64)



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Appendix D
Daily Trip Generation

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	150					
Land Use	Warehousing					
Setting	General Urban/Suburban					
Time Period	Weekday					
# Data Sites	15					
	% of 24-Hour Vehicle Trips					
Daily Trips	**1437**		**719**		**718**	
Time	Total	Total Trips	Entering	Entering Trips	Exiting	Exiting Trips
12:00 - 1:00 AM	0.3%	4	0.2%	1	0.4%	3
1:00 - 2:00 AM	0.5%	7	0.2%	1	0.8%	6
2:00 - 3:00 AM	0.3%	5	0.2%	2	0.4%	3
3:00 - 4:00 AM	0.5%	7	0.5%	4	0.5%	3
4:00 - 5:00 AM	1.2%	18	1.2%	9	1.2%	9
5:00 - 6:00 AM	3.0%	44	3.9%	28	2.2%	16
6:00 - 7:00 AM	5.9%	84	9.0%	65	2.8%	20
7:00 - 8:00 AM	6.5%	94	8.6%	62	4.6%	33
8:00 - 9:00 AM	6.2%	90	7.6%	55	4.9%	35
9:00 - 10:00 AM	7.2%	103	8.8%	63	5.7%	41
10:00 - 11:00 AM	6.0%	86	6.0%	43	6.0%	43
11:00 - 12:00 PM	7.3%	105	7.2%	52	7.4%	53
12:00 - 1:00 PM	8.7%	125	9.6%	68	7.8%	56
1:00 - 2:00 PM	6.2%	89	6.7%	49	5.6%	40
2:00 - 3:00 PM	7.1%	101	7.9%	57	6.2%	45
3:00 - 4:00 PM	9.0%	129	6.4%	46	11.4%	83
4:00 - 5:00 PM	7.4%	106	5.0%	36	9.7%	70
5:00 - 6:00 PM	6.8%	98	4.7%	33	8.8%	63
6:00 - 7:00 PM	3.8%	55	1.9%	14	5.6%	41
7:00 - 8:00 PM	1.3%	18	1.0%	7	1.5%	11
8:00 - 9:00 PM	0.8%	12	0.8%	6	0.9%	6
9:00 - 10:00 PM	2.3%	32	0.7%	5	3.8%	27
10:00 - 11:00 PM	0.9%	12	1.3%	9	0.5%	3
11:00 - 12:00 AM	0.9%	13	0.6%	4	1.2%	8

Hourly Distribution of Entering and Exiting Truck Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	150					
Land Use	Warehousing					
Setting	General Urban/Suburban					
Time Period	Weekday					
# Data Sites	11					
	% of 24-Hour Truck Trips					
Daily Trips	**532**		**266**		**266**	
Time	Total	Total Trips	Entering	Entering Trips	Exiting	Exiting Trips
12:00 - 1:00 AM	0.3%	2	0.3%	1	0.3%	1
1:00 - 2:00 AM	0.2%	1	0.3%	1	0.0%	0
2:00 - 3:00 AM	1.3%	7	1.1%	3	1.4%	4
3:00 - 4:00 AM	1.3%	7	1.7%	5	0.7%	2
4:00 - 5:00 AM	2.4%	13	1.7%	5	3.1%	8
5:00 - 6:00 AM	3.5%	18	3.4%	9	3.5%	9
6:00 - 7:00 AM	4.4%	23	5.2%	14	3.5%	9
7:00 - 8:00 AM	5.3%	28	3.2%	8	8.0%	22
8:00 - 9:00 AM	5.5%	29	4.3%	11	6.9%	18
9:00 - 10:00 AM	9.9%	53	12.1%	32	7.3%	19
10:00 - 11:00 AM	9.7%	52	8.0%	21	11.8%	31
11:00 - 12:00 PM	11.2%	59	10.6%	28	11.8%	31
12:00 - 1:00 PM	6.8%	36	8.0%	21	5.2%	14
1:00 - 2:00 PM	8.0%	43	8.3%	22	7.6%	20
2:00 - 3:00 PM	6.1%	33	6.3%	17	5.9%	16
3:00 - 4:00 PM	9.3%	49	10.6%	28	7.6%	20
4:00 - 5:00 PM	6.9%	37	7.5%	20	6.3%	17
5:00 - 6:00 PM	3.9%	21	3.4%	9	4.5%	12
6:00 - 7:00 PM	0.9%	5	0.9%	2	1.0%	3
7:00 - 8:00 PM	0.6%	3	0.6%	2	0.7%	2
8:00 - 9:00 PM	1.6%	8	1.7%	5	1.4%	4
9:00 - 10:00 PM	0.8%	4	0.3%	1	1.4%	4
10:00 - 11:00 PM	0.0%	0	0.0%	0	0.0%	0
11:00 - 12:00 AM	0.2%	1	0.3%	1	0.0%	0

Appendix E
Multi-Way Stop Control Evaluation

Dynamic Traffic, LLC
www.dynamictraffic.com
1904 Main Street
Lake Como, NJ 07719
T. 732.681.0760

TECHNICAL MEMORANDUM

To: **Village of Suffern Planning Board**

From: **Corey Chase, PE / Kevin Savage, PE, PTOE**

Date: **June 16, 2023**

Re: **Multi-Way Stop Control Evaluation**
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive
Village of Suffern & Village of Montebello, Rockland County, NY
DT# 3709-99-004T

Dynamic Traffic has prepared the following evaluation to determine the feasibility of Multi-Way Stop Control at the intersection of Montebello Road (CR 64) and Hemion Road (CR 93)/Ryan Mansion Drive located in the Village of Suffern and the Village of Montebello, Rockland County, New York, in association with the construction of an industrial park consisting of 1,221,800 SF of warehouse space located at 25 Old Mill Road in the Village of Suffern, Rockland County, New York (The Project). This evaluation has been prepared to assess the suitability of the study location for Multi Way Stop Control in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) guidance, and includes the following:

- The guidance for installing Multi-Way Stop applications set forth within the *Manual on Uniform Traffic Control Devices (MUTCD)* was reviewed.
- A three-year crash analysis was performed to identify trends.
- A sight distance analysis was conducted.
- Intersection safety improvements were identified.

MUTCD Guidance for Multi-Way Stop Applications

The MUTCD states, *"Multi-Way Stop Control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with Multi-Way Stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-Way Stop Control is used where the volume of traffic on the intersecting roads is approximately equal."*

The MUTCD provides guidance for determining whether a particular location is suitable for the application of Multi-Way Stop Control, as set forth in Section 2B.07. The subsequent evaluation was performed in accordance with these guidelines.

Existing Roadway Conditions

Montebello Road (CR 64) is an Urban Major Collector roadway under Rockland County jurisdiction to the east of Hemion Road and municipal jurisdiction to the west of Hemion Road with a general east/west orientation. The road has a posted 5-ton vehicular weight restriction. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are not provided along either side of the roadway. The pavement surface appears to be in good condition. Montebello Road provides a curved horizontal alignment and a rolling vertical alignment. Adequate sight distance is generally provided at the study area intersection; however, due to the horizontal curves along Montebello Road (CR 64) to the east of the Suffern Middle School, limited sight distance is provided for driveways in the vicinity of the curves. The land uses along Montebello Road are primarily residential.

Hemion Road (CR 93) is an Urban Major Collector roadway under Rockland County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are only provided intermittently near the intersection of Campbell Avenue/Hemion Road and Lafayette Avenue (NYS Route 59). The pavement surface appears to be in good condition. Hemion Road provides a curved horizontal alignment with an upgrade from north to south and provides generally adequate sight distance. The land uses along Hemion Road in the vicinity of The Project are primarily industrial.

Ryan Mansion Drive is a local roadway under private jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 15 MPH and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway while sidewalk is intermittently provided along both sides of the roadway. The pavement surface appears to be in good condition. Ryan Mansion Drive provides a straight horizontal alignment and a downgrade from north to south and provides generally adequate sight distance. The land uses along Ryan Mansion Drive are primarily office

Multi-Way Stop Evaluation

The MUTCD – Section 2B.07 paragraph 4 - Criteria A through D have been evaluated. The following sections detail each Primary Criteria, and how they apply to the study intersection.

A. ***Where traffic control signals are justified, the Multi-Way Stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.***

   Based upon review of the traffic volumes and crash history at this intersection, it is not anticipated that traffic signalization would be warranted.

   Multi-Way Stop Control is determined to not be warranted based upon Criteria A.

B. Five or more reported crashes in a 12-month period that are susceptible to correction by a Multi-Way Stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.

Police reports for crashes occurring at the intersection of Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive were provided for review by the Town of Ramapo Police Department. The crash history was examined for just under a five-year period, spanning from January 2018 to July 2022. A total of 4 crashes occurred at this intersection in that period. Therefore, there were no 12-month periods that have experienced 5 or more crashed that are considered correctable by a Multi-Way Stop application.

Multi-Way Stop Control is determined to not be warranted based upon Criteria B.

C. Minimum volumes:

1. ***The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and***
2. ***The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but***
3. ***If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.***

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition."

Existing Traffic Volumes

Manual turning movement (MTM) counts were conducted on Wednesday June 15th, 2022 from 7:00 AM to 9:00 AM and 3:00 PM to 6:30 PM at the intersection of Montebello Road (CR 64) and Hemion Road (CR 93)/Ryan Mansion Driveway. The traffic counts were normalized under the methodology described in the *Traffic Impact Study for IV2 Rockland Logisctics, LLC,* last revised June 16, 2023, prepared by this firm. As such an adjustment factor of 1.14 was applied to the as-counted traffic volumes. The traffic volumes are summarized in the tables below and traffic count data is appended.

Table I
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive Approach Volumes – Existing Traffic Volumes

Time	Major Roadway – Montebello Road (CR 64) *(vehicular volume only)*				Minor Roadway – Hemion Road (CR 93)/Ryan Mansion Drive *(vehicular & pedestrian volume)*			
	EB	**WB**	**Total**	**Meets Criteria C.1? *(300 vehicles)***	**NB**	**SB**	**Total**	**Meets Criteria C.2? *(200 vehicles & pedestrians)***
7:00 AM	320	193	513	**Yes**	251	3	254	**Yes**
8:00 AM	318	232	550	**Yes**	250	6	256	**Yes**
3:00 PM	216	338	554	**Yes**	362	13	375	**Yes**
4:00 PM	185	303	488	**Yes**	374	10	384	**Yes**
5:00 PM	173	284	457	**Yes**	376	25	401	**Yes**

Table II
Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64) Approach Volumes – Existing Traffic Volumes

Time	Major Roadway – Hemion Road (CR 93)/Ryan Mansion Drive *(vehicular volume only)*				Minor Roadway – Montebello Road (CR 64) *(vehicular & pedestrian volume)*			
	NB	**SB**	**Total**	**Meets Criteria C.1? *(300 vehicles)***	**EB**	**WB**	**Total**	**Meets Criteria C.2? *(200 vehicles & pedestrians)***
7:00 AM	251	3	254	No	320	193	513	**Yes**
8:00 AM	250	6	256	No	318	232	550	**Yes**
3:00 PM	362	13	375	**Yes**	216	338	554	**Yes**
4:00 PM	374	10	384	**Yes**	185	303	488	**Yes**
5:00 PM	376	25	401	**Yes**	173	284	457	**Yes**

As seen above, the minimum volumes set forth in criteria C.1 and C.2 were met for all five individual hours observed during the MTM counts with Montebello Road as the major roadway and three of the five individual hours observed with Hemion Road/Ryan Mansion Drive as the major roadway. Additionally, review of the average traffic volume interval data for the count stations located along Hemion Road and Montebello Road obtained from the NYSDOT Traffic Data viewer indicate that the minimum volumes set forth in criteria C.1 and C. 2 for at least eight hours on an average day.

Multi-Way Stop Control is determined to be warranted based upon Criteria C under existing traffic conditions.

Future Traffic Volumes

A growth rate for roadways within the study area was assumed to be 2.0% per year from 2022 to 2026. Future 2026 No Build traffic volumes were developed by applying the background growth rate of 2.0% for four (2) years to the study area roadways existing traffic volumes.

Trip generation projections for The Project were prepared utilizing trip generation research data as published under Land Use Code (LUC) 150 – Warehousing in the Institute of Transportation Engineers' (ITE) publication, Trip Generation, 11th Edition.

Table III
Proposed Daily Trip Generation

Use	Trip Type	In	Out	Total
Building 1 – 963,100 SF	Total	824	823	1647
	Trucks	289	289	578
	Cars	535	534	1069
Building 2 – 170,500 SF	Total	154	154	308
	Trucks	51	51	102
	Cars	103	103	206
Building 3 – 88,200 SF	Total	89	89	178
	Trucks	27	26	53
	Cars	62	63	125
Total	**Total**	**1067**	**1066**	**2133**
	Trucks	**367**	**366**	**733**
	Cars	**700**	**700**	**1400**

In order to estimate the traffic volumes at the study intersection throughout the day, hourly traffic projections were developed by applying temporal (time-of-day) distributions to the daily traffic projections. The temporal distribution provided for LUC 150 – Warehousing in *Trip Generation, 11th Edition* was applied to the daily site generated trips for the development. Once the hourly site generated traffic volumes are known, it is necessary to assign that traffic to that traffic to the adjacent street system. The distribution of traffic from the above development to the surrounding roadways is based on the trip distribution outlined in the *Traffic Impact Study for IV2 Rockland Logistics, LLC,* last revised June 16, 2023, prepared by this firm. The site-generated trips were added to the No Build traffic volumes to determine the Build traffic volumes for the purposes of the multi-way stop control evaluation.

The future Build traffic volumes were compared to the minimum volumes set forth in Criteria C.1 and C.2, which is summarized in the tables below.

Table IV
Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive Approach Volumes – Build Traffic Volumes

Time	Major Roadway – Montebello Road (CR 64) *(vehicular volume only)*				Minor Roadway – Hemion Road (CR 93)/Ryan Mansion Drive *(vehicular & pedestrian volume)*			
	EB	**WB**	**Total**	**Meets Criteria C.1? *(300 vehicles)***	**NB**	**SB**	**Total**	**Meets Criteria C.2? *(200 vehicles & pedestrians)***
7:00 AM	351	224	575	**Yes**	281	3	284	**Yes**
8:00 AM	347	264	611	**Yes**	280	6	286	**Yes**
3:00 PM	238	380	618	**Yes**	424	14	438	**Yes**
4:00 PM	202	336	538	**Yes**	423	10	433	**Yes**
5:00 PM	190	316	506	**Yes**	428	28	456	**Yes**

Table V
Hemion Road (CR 93)/Ryan Mansion Drive & Montebello Road (CR 64) Approach Volumes – Build Traffic Volumes

Time	Major Roadway – Hemion Road (CR 93)/Ryan Mansion Drive *(vehicular volume only)*				Minor Roadway – Montebello Road (CR 64) *(vehicular & pedestrian volume)*			
	NB	**SB**	**Total**	**Meets Criteria C.1? *(300 vehicles)***	**EB**	**WB**	**Total**	**Meets Criteria C.2? *(200 vehicles & pedestrians)***
7:00 AM	281	3	284	No	351	224	575	**Yes**
8:00 AM	280	6	286	No	347	264	611	**Yes**
3:00 PM	424	14	438	**Yes**	238	380	618	**Yes**
4:00 PM	423	10	433	**Yes**	202	336	538	**Yes**
5:00 PM	428	28	456	**Yes**	190	316	506	**Yes**

As seen above, the minimum volumes set forth in criteria C.1 and C.2 were met for all five individual hours investigated with Montebello Road as the major roadway and three of the five individual hours observed with Hemion Road/Ryan Mansion Drive as the major roadway. As noted previously, the minimum volumes are met in at least eight hours on an average day, which is anticipated to continue to be case under Build conditions.

Multi-Way Stop Control is determined to be warranted based upon Criteria C or D under Build conditions.

Additional Multi-Way Stop Criteria

The MUTCD sets forth Additional Criteria that may be considered in an engineering study. This section details the Additional Criteria set forth in Section 2B.07 paragraph 5, and how it applies to the study intersection.

A. The need to control left-turn conflicts;

While only four crashes were reported over the five-year period, two of the four (50%) of the reported crashes at this intersection involved a left turn conflict. As such, a trend of left-turn crashes was not identified at the intersection.

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;

The intersection does experience a minor volume of pedestrian traffic due to its residential setting as well as the nearby Suffern Middle School and Montebello Elementary School. Upon review of the traffic counts, the total pedestrian volume at the intersection during the 5 ½ hour included 13 total pedestrians. Therefore, Multi-Way Stop Control would help control potential vehicle/pedestrian conflicts at the intersection.

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and

Potential sight line obstructions were identified for drivers exiting the northbound approach of Hemion Road (CR 93), the eastbound approach of Montebello Road (CR 64), and the southbound approach of Ryan Mansion Drive.

On the southeast corner, there is a sizeable stone wall that goes around the perimeter of the corner, which may obstruct sight distance for northbound drivers looking to their right. On the southwest corner, there is a large fence which may obstruct sight distance for northbound drivers looking to their left. Additionally, Montebello Road (CR 64) has near 90-degree bends to both the east and west of the intersection with Hemion Road and Ryan Mansion Drive, which provides sight distance concerns looking in both directions while turning.

As such, it is anticipated that the installation of a Multi-Way Stop Control at the intersection would improve safety for vehicles exiting Hemion Road (CR 93) and Ryan Mansion Drive onto Montebello Road (CR 64).

D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where Multi-Way Stop Control would improve traffic operational characteristics of the intersection.

Both Montebello Road (CR 64) and Hemion Road (CR 93) are Urban Major Collector roadways under Rockland County jurisdiction with similar designs and land uses within the vicinity of the intersection. Throughout the observed days, the roadways experienced a similar total volume of traffic. As such, it is anticipated that Multi-Way Stop application would improve the safety, efficiency, organization, and overall operation of the intersection.

Based upon review of the four Additional Criteria (A-D), Multi-Way Stop Control could be considered to be warranted based upon Additional Criteria A, B, C, and D.

Findings

The following table summarizes that MUTCD criteria for installing Multi-Way Stop Control.

Table III
Multi-Way Stop Criteria

Multi-Way Stop Criteria *(MUTCD Section 2B.07 Par. 04)*		**Satisfied?**	**Description**
A		No	This intersection is not anticipated to satisfy warrants for a traffic signal based upon the observed traffic volumes and crash history.
B		No	Based upon review of crash history, the intersection did not experience the requisite number of crashes.
C	**1**	**Yes**	**The intersection satisfies the traffic volumes set forth in C.1 or C.2 under both Existing and Build conditions.**
	2	Yes	
D		N/A	-
Additional Criteria	A	No	Based upon review of crash history, there does not appear to be a trend of left turn conflicts.
	B	**Yes**	**The intersection is located in the vicinity of the two schools and several residential neighborhoods. As such, it is anticipated that AWSC may help reduce potential vehicle/pedestrian conflicts.**
	C	**Yes**	**The corners of the intersection have objects within the sight triangles.**
	D	**Yes**	**Both Montebello Road (CR 64) and Hemion Road (CR 64) are Urban Major Collector Roadways carry similar total volumes of traffic and similar land uses.**

As seen above, one of the Primary Multi-Way Stop Control Criteria and three of the four Additional Criteria as set forth in the MUTCD are satisfied.

Conclusions

Based upon the results of this evaluation, which was performed in accordance with the guidance set forth in the *Manual on Uniform Traffic Control Devices* (MUTCD), it is the professional opinion of Dynamic Traffic that a Multi-Way Stop Control application is appropriate at the intersection of Montebello Road (CR 64) and Hemion Road (CR 93)/Ryan Mansion Drive. It is anticipated that Multi-Way Stop application would improve the safety, efficiency, organization, and overall operation of the intersection.

If you have any questions or require any additional information, please do not hesitate to contact our office.

Dynamic Traffic, LLC
245 Main Street, Suite 110
Chester, NJ 07930
T. 732.681.0760

TECHNICAL MEMORANDUM

To: **Village of Suffern Planning Board**

From: **Corey Chase, PE / Kevin Savage, PE, PTOE**

Date: **September 16, 2022**
Last Revised October 13, 2023

Re: **Crash Analysis Memo**
Proposed Industrial Park
Old Mill Road & Hemion Road (CR 93)
Section 55.22 Block 1, Lot 1
Village of Suffern, Rockland County, NY
DT # 3709-99-004T

This analysis was conducted to analyze the crash history in the vicinity of the proposed industrial park located at Old Mill Road & Hemion Road (CR 93) Village of Suffern, Rockland County, NY.

Crash Analysis

Police reports for crashes occurring from January 2018 to July 2022 in the vicinity of the site at the following intersections were provided for review by the Town of Ramapo Police Department:

- Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road (CR 93)
- Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)
- Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps
- Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps
- Airmont Road (CR 89) & North DeBaun Avenue
- Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard
- Airmont Road (CR 89) & Executive Boulevard
- Hemion Road (CR 93) & Dunnigan Drive
- Lafayette Avenue (NYS Route 59) & Brookside Avenue
- Montebello Road (CR 64) & Hemion Road (CR 93)/Ryan Mansion Drive
- Airmont Road (CR 89) & Dunnigan Drive
- Hemion Road (CR 93) & Suffern Middle School Driveway
- Montebello Road (CR 64) & Suffern Middle School Driveway
- Montebello Road (CR 64) & Montebello Elementary School Driveway

Further, an Application for Public Access to Town Records was submitted to the Town of Ramapo on December 1, 2022, which requested the following:

"Our office is requesting complete accident reports from the last 4 years (January 2018-Present) for the following roadways. Please note that a FOIL request was submitted on July 19, 2022 for accident reports at specific intersections. This request seeks accident data along the roadways listed below that was not included with the previous request.

- Lafayette Avenue (NY 59) from Hemion Road to Brookside Avenue (not including the intersections with Hemion Road & Brookside Avenue)
- Hemion Road from Lafayette Avenue (NY 59) to Ramapo Cirque Boulevard (not including the intersection with Lafayette Avenue (NY 59))
- Montebello Road from Karsten Drive to Airmont Road (not including the intersection with Airmont Road)"

It should be noted that it is anticipated that the previous request covered all roadway segments not listed above due to the proximity of adjacent intersections. In response to the Records Request, additional crash records were received from the Town of Ramapo on December 6, 2022. No crashes were reports on the roadway segments listed above that were not located at one of the study intersections. Further, additional data was received for more recent crashes at three of the study intersections. Therefore, the crash analysis summaries and this memorandum have been updated to include the additional data received.

The crash rates at each intersection were then calculated using the Average Annual Daily Traffic (AADT) from the NYSDOT Traffic Data viewer and compared to the Average Accident Rates for State Highway by Facility Type Table published by the New York State Department of Motor Vehicles. The following details the crash history at each intersection. The crash rate calculations, statewide average crash rates, and full breakdowns of the crash history at each intersection can be found appended to this memo.

Lafayette Avenue (NYS Route 59) & Campbell Avenue/Hemion Road (CR 93)

As shown in the appended table, a total of 49 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 1.09 crashes per million entering vehicles (MEV), which is higher than the statewide average of 0.56 crashes per MEV for urban signalized four-leg intersections. Note that 29 of those crashes (approximately 59%) were same direction rear-end crashes that are typical at signalized intersections as a result of driver inattentiveness. Eleven of the reported crashes resulted in minor injuries; no major injuries or fatalities were reported.

Several countermeasures are available to reduce the prevalence of rear-end crashes at the intersection. Specifically, it is recommended that W3-4 "Be Prepared to Stop" signs be installed in advance of the intersection to warn drivers of stopped vehicles queuing at the intersection. The *Toolbox of Countermeasures for Intersection Crashes*, published by the FHWA, indicated that the installation of a dual left turn lane and change from protected-permitted phasing to protected-only phasing, as is proposed by The Project for the southbound approach of Hemion Road (CR 93), would result in a decrease of rear-end crashes.

Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)

As shown in the appended table, a total of 90 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 1.14 crashes per million entering vehicles (MEV), which is higher than the statewide average of 0.56 crashes per MEV for urban signalized four-leg intersections. Note that 37 of those crashes (approximately 41%) were same direction rear-end crashes that are typical at signalized intersections as a result of driver inattentiveness. Another 19 crashes (approximately 21%) were same-direction sideswipe crashes. Eight of the reported crashes resulted in minor injuries; no major injuries or fatalities were reported.

Several countermeasures are available to reduce the prevalence of rear-end crashes at the intersection. Specifically, it is recommended that traffic signal backplates can be installed on the signals facing east and west to improve visibility of the signals in dusk and dawn conditions. It is also recommended that W3-4 "Be Prepared to Stop" signs can be installed in advance of the intersection to warn drivers of stopped vehicles queuing at the intersection. The *Toolbox of Countermeasures for Intersection Crashes*, published by the FHWA, indicated that the installation of a dual left turn lane and change from protected-permitted phasing to protected-only phasing, as is proposed by The Project for the eastbound approach of Lafayette Avenue (NYS Route 59), would result in a decrease of rear-end crashes.

Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps

As shown in the appended table, a total of 24 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.36 crashes per million entering vehicles (MEV), which is lower than the statewide average of 0.56 crashes per MEV for urban signalized four-leg intersections. Eight of the reported crashes (approximately 33%) involved a same-direction sideswipe collision. Note that 13 of the reported crashes (approximately 24%) involved same direction rear-end that are typical at signalized intersections as a result of driver inattentiveness. Four of the reported crashes resulted in minor or moderate injuries; no major injuries or fatalities were reported.

Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps

As shown in the appended table, a total of 26 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.40 crashes per million entering vehicles (MEV), which is lower than the statewide average of 0.56 crashes per MEV for urban signalized four-leg intersections. Note that 8 of those crashes (approximately 31%) were same direction rear-end crashes that are typical at signalized intersections as a result of driver inattentiveness . Two of the reported crashes resulted in minor or moderate injuries; no major injuries or fatalities were reported.

Airmont Road (CR 89) & North DeBaun Avenue

As shown in the appended table, a total of 29 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.60 crashes per million entering vehicles (MEV), which is higher than the statewide average of 0.56 crashes per MEV for urban signalized four-leg intersections. Four of the reported crashes resulted in minor injuries; no major injuries or fatalities were reported.

Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard

As shown in the appended table, a total of 27 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.61 crashes per million entering vehicles (MEV), which is higher than the statewide average of 0.56 crashes per MEV for urban signalized four-leg intersections. Note that 10 of those crashes (approximately 37%) were same direction rear-end crashes that are typical at signalized intersections as a result of driver inattentiveness. Six of the reported crashes resulted in minor or moderate injuries; no major injuries or fatalities were reported.

Airmont Road (CR 89) & Executive Boulevard

As shown in the appended table, a total of 24 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.52 crashes per million entering vehicles (MEV), which is greater than the statewide average of 0.32 crashes per MEV for urban signalized three-leg intersections. Note that 7 of those crashes (approximately 29%) were same direction rear-end crashes that are typical at signalized intersections as a result of driver inattentiveness. Three of the reported crashes resulted in minor injuries; no major injuries or fatalities were reported.

Hemion Road (CR 93) & Dunnigan Drive

No crashes were reported at this intersection.

Lafayette Avenue (Route 59) & Brookside Avenue

As shown in the appended table, a total of 16 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.46 crashes per million entering vehicles (MEV), which is higher than the statewide average of 0.19 crashes per MEV for urban unsignalized three-leg intersections. Four of the reported crashes resulted in minor injuries; no major injuries or fatalities were reported.

Hemion Road (CR 93) & Montebello Road (CR 64)

As shown in the appended table, a total of 4 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.24 crashes per million entering vehicles (MEV), which is higher than the statewide average of 0.19 crashes per MEV for urban unsignalized four-leg intersections. Two of the reported crashes (approximately 50%) were same direction rear-end crashes that are typical at stop-controlled intersections. All crashes occurred during the daytime. One of the reported crashes resulted in minor injuries; no major injuries or fatalities were reported.

Airmont Road (CR 89) & Dunnigan Drive

As shown in the appended table, a total of 8 crashes have occurred at the intersection within the 5-year study period. This equates to a crash rate of 0.15 crashes per million entering vehicles (MEV), which is lower than the statewide average of 0.19 crashes per MEV for urban unsignalized four-leg intersections. Two of the reported crashes (approximately 25%) were same direction rear-end crashes that are typical at stop-controlled intersections. Two of the reported crashes resulted in minor or moderate injuries; no major injuries or fatalities were reported.

Hemion Road (CR 93) & Suffern Middle School Driveway

No crashes were reported at this intersection.

Montebello Road (CR 64) & Suffern Middle School Driveway

No crashes were reported at this intersection.

Montebello Road (CR 64) & Montebello Elementary School Driveway

No crashes were reported at this intersection.

AVERAGE ACCIDENT RATES FOR STATE HIGHWAYS BY FACILITY TYPE

(BASED ON ACCIDENT DATA September 1, 2017 TO August 31, 2019)

Average accident rates are based on both reportable and available non-reportable crashes.

MAINLINE ACCIDENTS ONLY: "Non-Intersection Accidents/MVM" is used for linear highway sections where there are no intersecting roads or ramp junctions within analysis limits. An example of the correct use of these rates would involve a linear section of highway which contains no intersections with other public highways, but may contain intersections with private roads or driveways.

MAINLINE & JUNCTURE ACCIDENTS: "Intersection & Non-Intersection Accidents/MVM" includes intersection and mainline accidents. They are used for analysis of linear highway sections where intersections are involved within the analysis limits and are the most commonly used rates for accident analysis purposes.

FACILITY TYPE

FREE ACCESS CONTROLLED	MAINLINE ACCIDENTS ONLY			MAINLINE & JUNCTURE ACCIDENTS		
RURAL FUNCTION CLASS	ALL TYPES	WET ROAD	FIXED OBJECT	ALL TYPES	WET ROAD	FIXED OBJECT
UNDIVIDED	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM
2 LANES	2.17	0.41	0.57	2.72	0.51	0.67
3 LANES	1.93	0.44	0.54	2.26	0.48	0.59
4 LANES	2.03	0.34	0.55	2.77	0.49	0.65
ALL LANES	2.16	0.41	0.58	2.71	0.51	0.66
DIVIDED						
2 LANES	1.79	0.33	0.44	2.46	0.44	0.51
4 LANES	1.79	0.34	0.46	2.03	0.38	0.51
ALL LANES	1.82	0.34	0.46	2.19	0.41	0.51

URBAN FUNCTION CLASS

UNDIVIDED						
2 LANES	2.38	0.44	0.34	3.73	0.68	0.44
3 LANES	3.34	0.6	0.28	5.31	0.95	0.38
4 LANES	3.57	0.69	0.19	6.41	1.22	0.31
ALL LANES	2.64	0.49	0.32	4.27	0.79	0.43
DIVIDED						
2 LANES	3.45	0.64	0.2	5.56	1.02	0.32
4 LANES	2.99	0.56	0.18	4.63	0.87	0.25
6 LANES	4.14	0.77	0.15	5.53	1.01	0.18
7 LANES	3.51	0.6	0.06	3.82	0.69	0.07
ALL LANES	3.36	0.63	0.17	5.02	0.94	0.26

PARTIAL CONTROL OF ACCESS

RURAL FUNCTION CLASS	MAINLINE ACCIDENTS ONLY			MAINLINE & JUNCTURE ACCIDENTS		
	ALL TYPES	WET ROAD	FIXED OBJECT	ALL TYPES	WET ROAD	FIXED OBJECT
UNDIVIDED	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM
2 LANES	1.94	0.43	0.42	2.41	0.54	0.49
ALL LANES	1.92	0.43	0.41	2.41	0.54	0.49
DIVIDED						
4 LANES	1.79	0.35	0.75	1.88	0.37	0.78
ALL LANES	1.8	0.36	0.75	1.89	0.38	0.77

URBAN FUNCTION CLASS

UNDIVIDED						
2 LANES	2.07	0.56	0.49	2.76	0.68	0.6
ALL LANES	2.48	0.62	0.44	3.42	0.82	0.51
DIVIDED						
4 LANES	1.69	0.33	0.26	2.16	0.42	0.29
6 LANES	1.85	0.33	0.21	2.22	0.39	0.24
ALL LANES	1.88	0.35	0.25	2.36	0.44	0.28

CONTROLLED ACCESS (FULL)

RURAL FUNCTION CLASS

UNDIVIDED						
2 LANES	2.05	0.44	0.55	2.37	0.5	0.62
ALL LANES	2.15	0.46	0.55	2.48	0.52	0.61

DIVIDED						
4 LANES	1.08	0.19	0.44	1.1	0.2	0.45
5 LANES	0.94	0.19	0.42	0.97	0.2	0.42
6 LANES	0.97	0.21	0.21	1.09	0.24	0.21
ALL LANES	1.08	0.19	0.44	1.11	0.2	0.44

	MAINLINE ACCIDENTS ONLY			MAINLINE & JUNCTURE ACCIDENTS		
URBAN FUNCTION CLASS	ALL TYPES	WET ROAD	FIXED OBJECT	ALL TYPES	WET ROAD	FIXED OBJECT
UNDIVIDED	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM	ACC/MVM
ALL LANES	2.19	0.4	0.29	2.94	0.53	0.39

DIVIDED						
4 LANES	1.24	0.24	0.27	1.33	0.26	0.27
5 LANES	1.21	0.22	0.23	1.41	0.25	0.25
6 LANES	1.34	0.26	0.19	1.41	0.27	0.19
7 LANES	1.49	0.27	0.22	1.58	0.29	0.24
ALL LANES	1.3	0.25	0.2	1.39	0.26	0.2

AVERAGE INTERSECTION ACCIDENT RATES FOR STATE HIGHWAYS BY INTERSECTION TYPE

(BASED ON ACCIDENT DATA September 1, 2017 TO August 31, 2019)

INTERSECTION TYPE RURAL FUNCTION CLASS	ALL TYPES ACC/MEV	WET ROAD ACC/MEV	LEFT TURN ACC/MEV	REAR END CC/ME	OVER-TAKING ACC/MEV	RIGHT ANGLE ACC/MEV	RIGHT TURN ACC/MEV	HEAD ON ACC/MEV	SIDE-SWIPE ACC/MEV
3 LEGGED INTERSECTIONS									
SIGNAL ALL LANES	0.47	0.07	0.03	0.18	0.03	0.07	0.02	0.02	0.01
SIGN ALL LANES	0.17	0.03	0.01	0.03	0.01	0.02	0.00	0.00	0.00
NO CONTROL ALL LAI	0.12	0.02	0.01	0.02	0.00	0.01	0.00	0.00	0.00
4LEGGED&>INTERSECTIONS									
SIGNAL ALL LANES	0.66	0.13	0.06	0.18	0.05	0.17	0.03	0.01	0.02
SIGN ALL LANES	0.35	0.06	0.02	0.05	0.01	0.11	0.01	0.01	0.01
NO CONTROL ALL LAI	0.24	0.04	0.01	0.02	0.01	0.05	0	0.01	0
ON RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0.38	0	0	0.19	0	0	0	0	0
MERGE W/ 2&> LANE	0.02	0	0	0	0	0	0	0	0
OFF RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0.47	0	0	0.09	0.19	0	0	0	0
MERGE W/ 2&> LANE	0.06	0.01	0	0	0.01	0	0	0	0

INTERSECTION TYPE URBAN FUNCTION CLASS	ALL TYPES ACC/MEV	WET ROAD ACC/MEV	LEFT TURN ACC/MEV	REAR END CC/ME	OVER-TAKING ACC/MEV	RIGHT ANGLE ACC/MEV	RIGHT TURN ACC/MEV	HEAD ON ACC/MEV	SIDE-SWIPE ACC/MEV
3 LEGGED INTERSECTIONS									
SIGNAL 1-4 LANES	0.32	0.06	0.03	0.13	0.04	0.04	0.01	0	0.01
SIGNAL W/ LEFT TURN 5 &	0.17	0.03	0.01	0.07	0.03	0.02	0	0	0
SIGNAL W/0 LEFT TURN 5 &	0.13	0.02	0.01	0.05	0.02	0.01	0.01	0	0
SIGN 1-3 LANES	0.19	0.03	0.01	0.06	0.01	0.03	0.01	0	0
SIGN 4 LANES	0.13	0.02	0.01	0.04	0.02	0.02	0	0	0
SIGN 5 & > LANES	0.07	0.01	0	0.03	0.01	0.01	0	0	0
NO CONTROL ALL LANI	0.06	0.01	0	0.02	0.01	0.01	0	0	0
4 LEGGED &> INTERSECTIONS									
SIGNAL 1-4 LANES	0.56	0.1	0.05	0.21	0.08	0.09	0.02	0.01	0.01
SIGNAL W/ LEFT T	0.26	0.04	0.02	0.11	0.05	0.03	0.01	0	0
SIGNAL W/0 LEFT	0.24	0.04	0.02	0.07	0.04	0.05	0.01	0	0
SIGN 1-3 LANES	0.31	0.06	0.02	0.08	0.02	0.08	0.01	0	0.01
SIGN 4 & > LANES	0.15	0.03	0.01	0.05	0.02	0.03	0	0	0
NO CONTROL ALL	0.12	0.03	0.01	0.04	0.02	0.02	0	0	0
ON RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0.04	0	0	0.01	0.01	0	0	0	0
MERGE W/ 2 LANES	0.02	0	0	0.01	0.01	0	0	0	0
MERGE W/ 3&> LANE	0.02	0	0	0.01	0	0	0	0	0
OFF RAMP (ALL CONTROL)									
MERGE W/ 1 LANE	0.05	0.01	0	0.02	0.01	0.01	0	0	0
MERGE W/ 2 LANES	0.03	0.01	0	0.01	0.01	0	0	0	0
MERGE W/ 3&> LANE	0.02	0	0	0.01	0.01	0	0	0	0

Crash Rate Calculation

Prepared By: J. Ramos **Checked By:** K. Savage
Date: 6/16/2023 **Job #:** 3709-99-004T

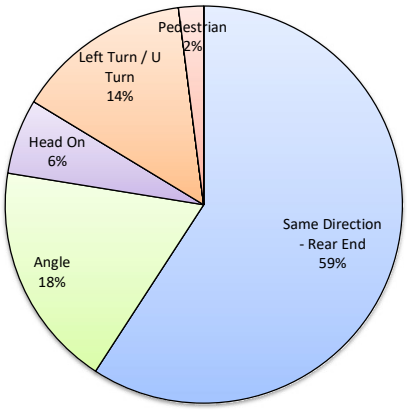
Intersection	Intersection Volume from MTM Counts	K-Factor	Entering AADT	Total Crashes	Injury Crashes	Fatal Crashes	Total Crash Rate (per MEV)	Injury Crash Rate (per MEV)	Fatal Crash Rate (per MEV)
Lafayette Avenue (Route 59) & Hemion Road (CR 93)	1962	8	24525	49	11	0	1.09	0.25	0.00
Lafayette Ave (Route 59) & Airmont Rd (CR 89)	3024	7	43200	90	8	0	1.14	0.10	0.00
Airmont Rd (CR 89) & I-87 SB/I-287 EB Ramp	2924	8	36550	24	4	0	0.36	0.06	0.00
Airmont Rd (CR 89) & I-87 NB/I-287 WB Ramp	2844	8	35550	26	2	0	0.40	0.03	0.00
Airmont Rd (CR 89) & North DeBaun Avenue	2375	9	26389	29	4	0	0.60	0.08	0.00
Airmont Rd (CR 89) & Montebello Rd (CR 64)/Rella Road	1939	8	24238	27	6	0	0.61	0.14	0.00
Airmont Road (CR 89) & Executive Boulevard	2037	8	25463	24	3	0	0.52	0.06	0.00
Lafayette Ave (Route 59) & Brookside Avenue	1531	8	19138	16	4	0	0.46	0.11	0.00
Hemion Road (CR 93) & Montebello Road (CR 64)	818	9	9089	4	1	0	0.24	0.06	0.00
Airmont Rd (CR 89) & Dunnigan Drive	2304	8	28800	8	2	0	0.15	0.04	0.00

DYNAMIC TRAFFIC

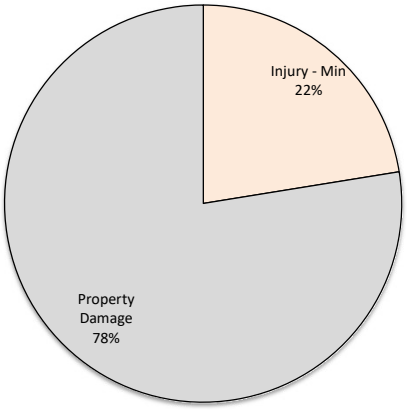
Location: Lafayette Ave (Route 59) & Hemion Rd (CR 93)
Town, County, State: Village of Montebello, Rockland County, NY
DT #: 3709-99-004T
Time Period January 2018 - November 2022

Crash Analysis

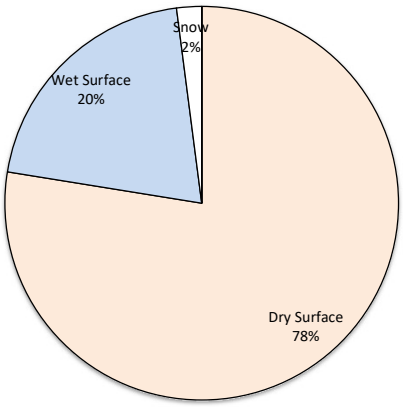
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	11	8	1	4	5	29	59%
Same Direction - Sideswipe	0	0	0	0	0	0	0%
Angle	1	1	2	2	3	9	18%
Head On	1	0	0	1	1	3	6%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	2	1	1	1	2	7	14%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	0	0	0	0	0%
Animal	0	0	0	0	0	0	0%
Pedestrian	0	0	1	0	0	1	2%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	15	10	5	8	11	49	100%



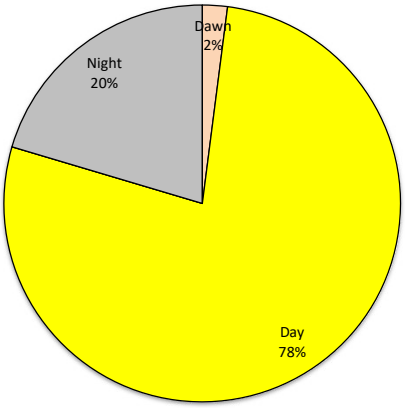
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	0	0	0	0	0	0%
Injury - Min	2	1	3	1	4	11	22%
Property Damage	13	9	2	7	7	38	78%
Total	15	10	5	8	11	49	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	12	8	2	8	8	38	78%
Wet Surface	3	2	3	0	2	10	20%
Snow	0	0	0	0	1	1	2%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	15	10	5	8	11	49	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	1	0	0	0	1	2%
Day	12	9	3	6	8	38	78%
Dusk	0	0	0	0	0	0	0%
Night	3	0	2	2	3	10	20%
Unknown	0	0	0	0	0	0	0%
Total	15	10	5	8	11	49	100%

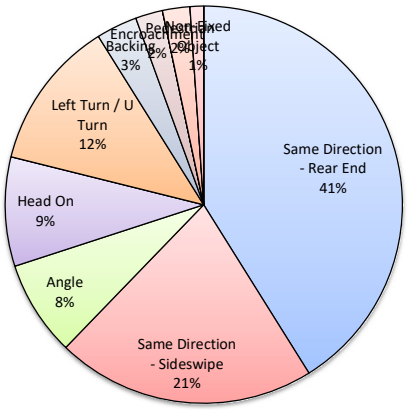


DYNAMIC TRAFFIC

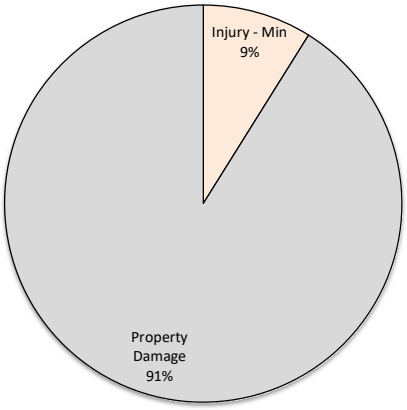
Location:	Lafayette Ave (Route 59) & Airmont Rd (CR 89)
Town, County, State:	Village of Airmont, Rockland County, NY
DT #:	3709-99-004T
Time Period	January 2018 - July 2022

Crash Analysis

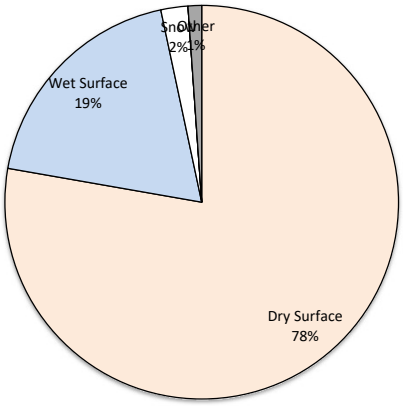
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	6	13	6	7	5	37	41%
Same Direction - Sideswipe	6	5	2	4	2	19	21%
Angle	2	2	2	1	0	7	8%
Head On	3	0	2	2	1	8	9%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	3	3	3	1	1	11	12%
Backing	0	1	1	1	0	3	3%
Encroachment	1	1	0	0	0	2	2%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	0	0	0	0	0%
Animal	0	0	0	0	0	0	0%
Pedestrian	1	1	0	0	0	2	2%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	1	1	1%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	22	26	16	16	10	90	100%



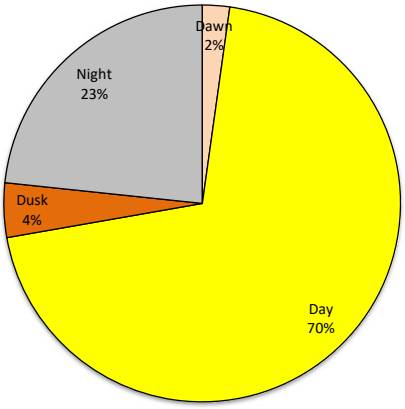
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	0	0	0	0	0	0%
Injury - Min	1	1	3	3	0	8	9%
Property Damage	21	25	13	13	10	82	91%
Total	22	26	16	16	10	90	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	16	23	11	13	7	70	78%
Wet Surface	4	3	5	3	2	17	19%
Snow	2	0	0	0	0	2	2%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	1	1	1%
Total	22	26	16	16	10	90	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	2	0	0	2	2%
Day	15	18	11	11	8	63	70%
Dusk	2	1	0	1	0	4	4%
Night	5	7	3	4	2	21	23%
Unknown	0	0	0	0	0	0	0%
Total	22	26	16	16	10	90	100%

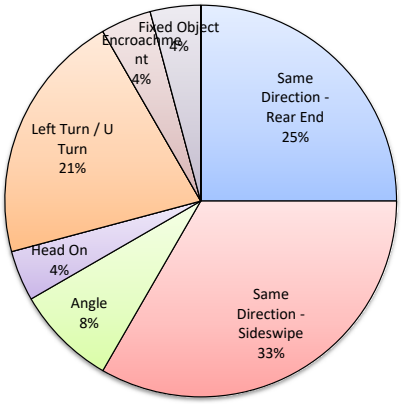


DYNAMIC TRAFFIC

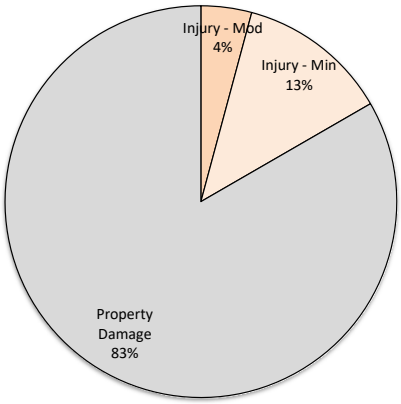
Location: Airmont Rd (CR 89) & I-87 SB/I-287 EB Ramp
Town, County, State: Village of Montebello, Rockland County, NY
DT #: 3709-99-004T
Time Period January 2018 - July 2022

Crash Analysis

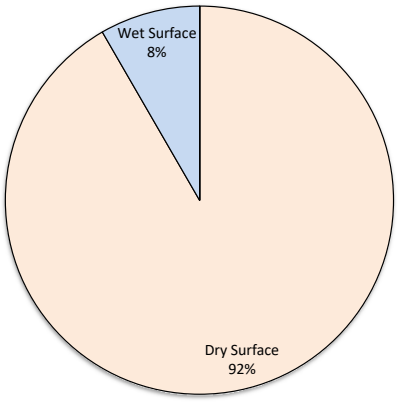
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	2	0	0	2	2	6	25%
Same Direction - Sideswipe	4	1	0	1	2	8	33%
Angle	0	1	1	0	0	2	8%
Head On	0	0	1	0	0	1	4%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	1	1	0	1	2	5	21%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	1	0	1	4%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	0	0	1	1	4%
Animal	0	0	0	0	0	0	0%
Pedestrian	0	0	0	0	0	0	0%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	7	3	2	5	7	24	100%



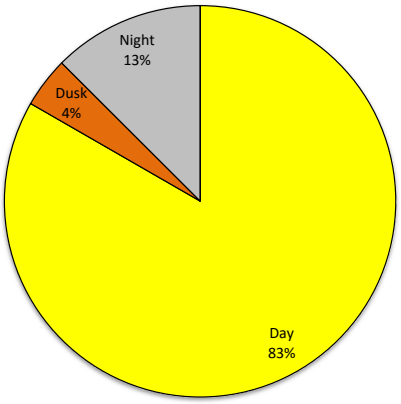
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	1	0	0	0	1	4%
Injury - Min	1	1	1	0	0	3	13%
Property Damage	6	1	1	5	7	20	83%
Total	7	3	2	5	7	24	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	7	3	2	4	6	22	92%
Wet Surface	0	0	0	1	1	2	8%
Snow	0	0	0	0	0	0	0%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	7	3	2	5	7	24	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	0	0	0	0%
Day	7	2	2	3	6	20	83%
Dusk	0	0	0	0	1	1	4%
Night	0	1	0	2	0	3	13%
Unknown	0	0	0	0	0	0	0%
Total	7	3	2	5	7	24	100%

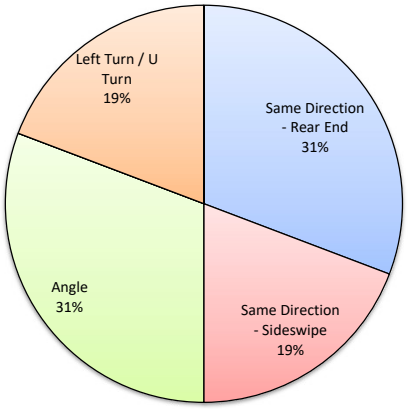


DYNAMIC TRAFFIC

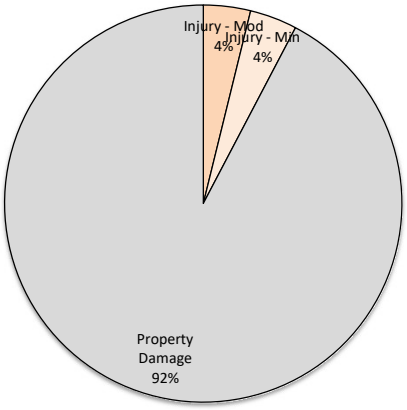
Location: Airmont Rd (CR 89) & I-87 NB/I-287 WB Ramp
Town, County, State: Village of Montebello, Rockland County, NY
DT #: 3709-99-004T
Time Period January 2018 - July 2022

Crash Analysis

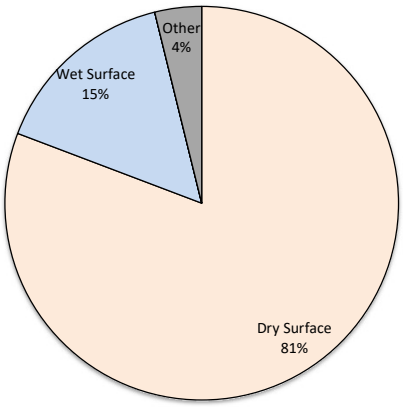
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	3	3	1	1	0	8	31%
Same Direction - Sideswipe	1	2	0	1	1	5	19%
Angle	3	5	0	0	0	8	31%
Head On	0	0	0	0	0	0	0%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	1	1	0	2	1	5	19%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	0	0	0	0	0%
Animal	0	0	0	0	0	0	0%
Pedestrian	0	0	0	0	0	0	0%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	8	11	1	4	2	26	100%



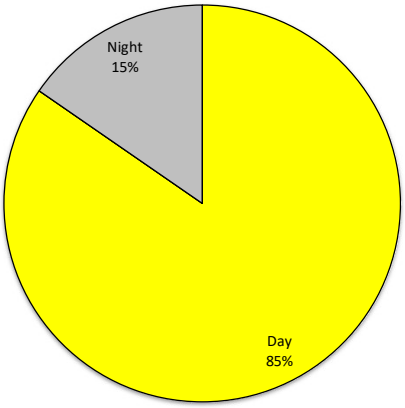
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	1	0	0	0	1	4%
Injury - Min	0	1	0	0	0	1	4%
Property Damage	8	9	1	4	2	24	92%
Total	8	11	1	4	2	26	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	5	10	1	3	2	21	81%
Wet Surface	2	1	0	1	0	4	15%
Snow	0	0	0	0	0	0	0%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	1	0	0	0	0	1	4%
Total	8	11	1	4	2	26	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	0	0	0	0%
Day	7	10	1	2	2	22	85%
Dusk	0	0	0	0	0	0	0%
Night	1	1	0	2	0	4	15%
Unknown	0	0	0	0	0	0	0%
Total	8	11	1	4	2	26	100%

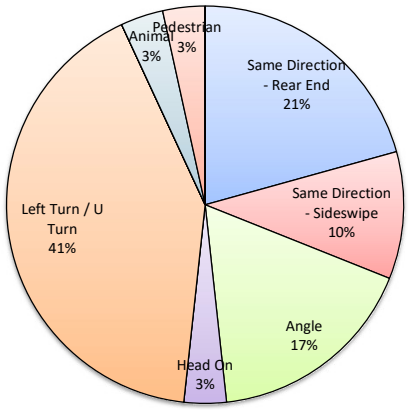


DYNAMIC TRAFFIC

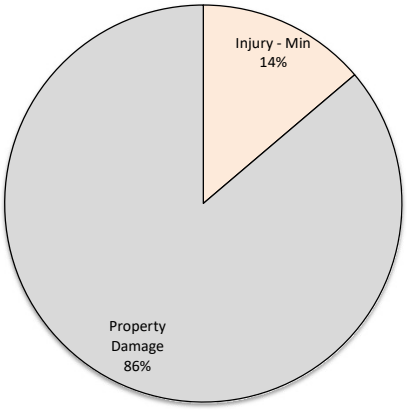
Location: Airmont Rd (CR 89) & North DeBaun Avenue
Town, County, State: Village of Airmont, Rockland County, NY
DT #: 3709-99-004T
Time Period January 2018 - July 2022

Crash Analysis

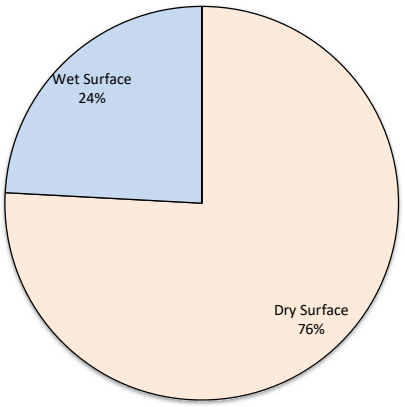
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	1	1	1	3	0	6	21%
Same Direction - Sideswipe	2	0	0	0	1	3	10%
Angle	0	1	1	0	3	5	17%
Head On	0	0	0	1	0	1	3%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	4	4	0	2	2	12	41%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	0	0	0	0	0%
Animal	1	0	0	0	0	1	3%
Pedestrian	0	0	1	0	0	1	3%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	8	6	3	6	6	29	100%



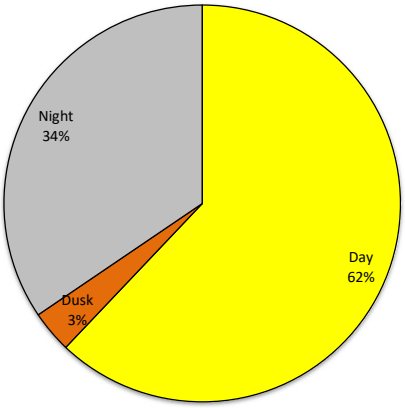
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	0	0	0	0	0	0%
Injury - Min	0	1	2	0	1	4	14%
Property Damage	8	5	1	6	5	25	86%
Total	8	6	3	6	6	29	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	7	4	2	5	4	22	76%
Wet Surface	1	2	1	1	2	7	24%
Snow	0	0	0	0	0	0	0%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	8	6	3	6	6	29	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	0	0	0	0%
Day	4	5	1	4	4	18	62%
Dusk	0	0	1	0	0	1	3%
Night	4	1	1	2	2	10	34%
Unknown	0	0	0	0	0	0	0%
Total	8	6	3	6	6	29	100%

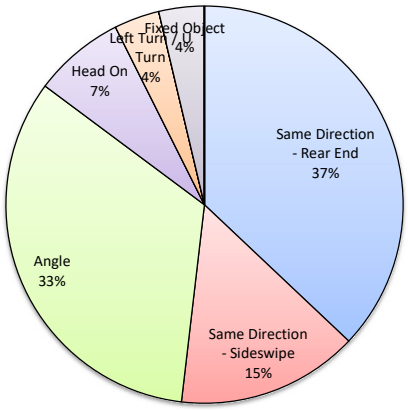


DYNAMIC TRAFFIC

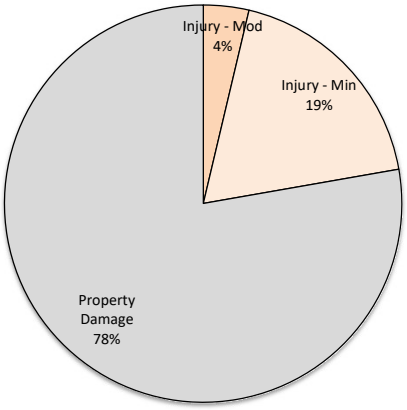
Location:	Airmont Rd (CR 89) & Montebello Rd (CR 64)/Rella Blvd
Town, County, State:	Village of Montebello, Rockland County, NY
DT #:	3709-99-004T
Time Period	January 2018 - November 2022

Crash Analysis

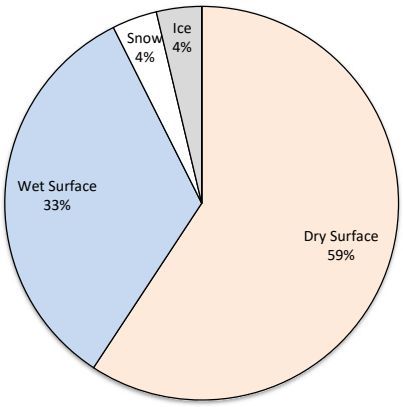
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	4	0	0	4	2	10	37%
Same Direction - Sideswipe	0	0	0	2	2	4	15%
Angle	3	3	0	1	2	9	33%
Head On	0	0	0	0	2	2	7%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	1	0	0	0	0	1	4%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	1	0	0	1	4%
Animal	0	0	0	0	0	0	0%
Pedestrian	0	0	0	0	0	0	0%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	8	3	1	7	8	27	100%



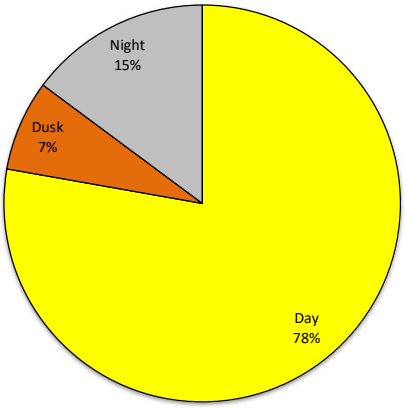
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	1	0	0	0	0	1	4%
Injury - Min	4	0	0	1	0	5	19%
Property Damage	3	3	1	6	8	21	78%
Total	8	3	1	7	8	27	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	5	1	1	4	5	16	59%
Wet Surface	3	1	0	3	2	9	33%
Snow	0	1	0	0	0	1	4%
Ice	0	0	0	0	1	1	4%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	8	3	1	7	8	27	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	0	0	0	0%
Day	7	0	1	6	7	21	78%
Dusk	1	1	0	0	0	2	7%
Night	0	2	0	1	1	4	15%
Unknown	0	0	0	0	0	0	0%
Total	8	3	1	7	8	27	100%

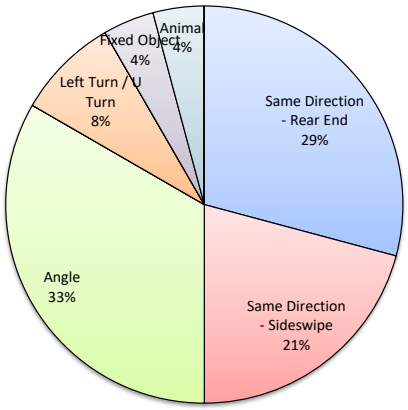


DYNAMIC TRAFFIC

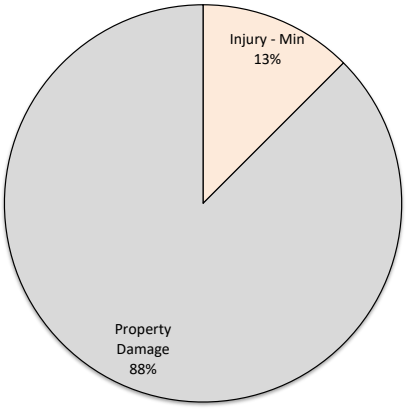
Location:	Airmont Rd (CR 89) & Executive Boulevard
Town, County, State:	Village of Montebello, Rockland County, NY
DT #:	3709-99-004T
Time Period	January 2018 - March 2023

Crash Analysis

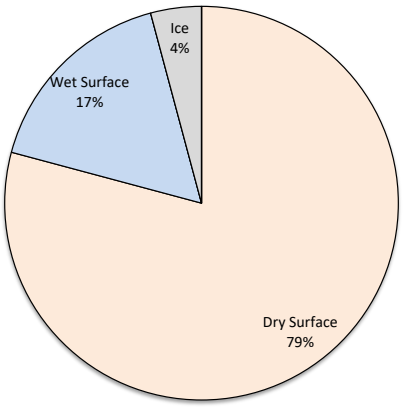
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	3	1	0	2	1	7	29%
Same Direction - Sideswipe	1	1	0	2	1	5	21%
Angle	3	1	0	4	0	8	33%
Head On	0	0	0	0	0	0	0%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	1	0	0	0	1	2	8%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	1	0	0	0	0	1	4%
Animal	0	0	0	1	0	1	4%
Pedestrian	0	0	0	0	0	0	0%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	9	3	0	9	3	24	100%



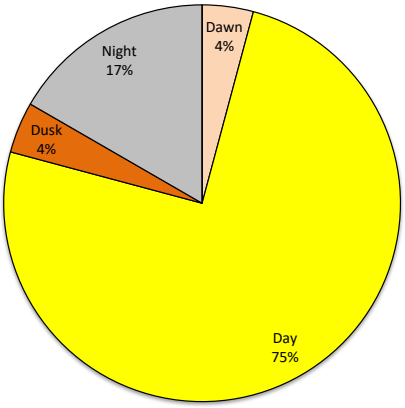
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	0	0	0	0	0	0%
Injury - Min	2	0	0	1	0	3	13%
Property Damage	7	3	0	8	3	21	88%
Total	9	3	0	9	3	24	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	5	3	0	8	3	19	79%
Wet Surface	3	0	0	1	0	4	17%
Snow	0	0	0	0	0	0	0%
Ice	1	0	0	0	0	1	4%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	9	3	0	9	3	24	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	1	0	1	4%
Day	5	3	0	7	3	18	75%
Dusk	1	0	0	0	0	1	4%
Night	3	0	0	1	0	4	17%
Unknown	0	0	0	0	0	0	0%
Total	9	3	0	9	3	24	100%

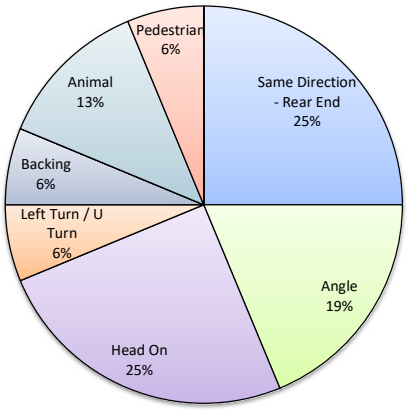


DYNAMIC TRAFFIC

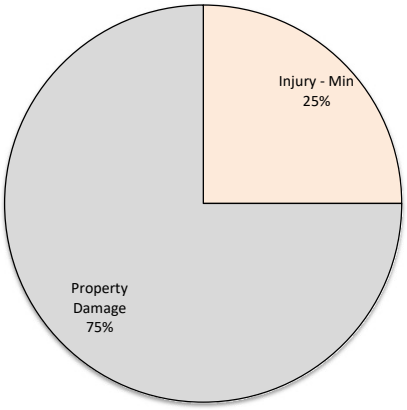
Location: Lafayette Ave (Route 59) & Brookside Avenue
Town, County, State: Village of Airmont, Rockland County, NY
DT #: 3709-99-004T
Time Period January 2018 - November 2022

Crash Analysis

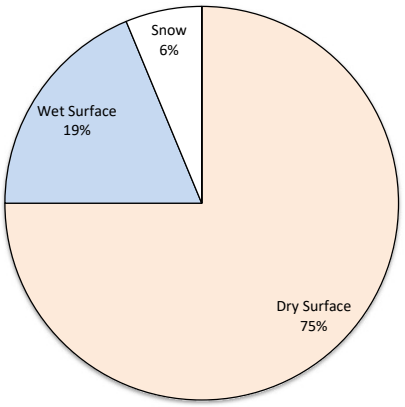
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	0	3	1	0	0	4	25%
Same Direction - Sideswipe	0	0	0	0	0	0	0%
Angle	1	0	0	1	1	3	19%
Head On	1	2	0	0	1	4	25%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	1	0	0	0	0	1	6%
Backing	0	0	0	0	1	1	6%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	0	0	0	0	0%
Animal	2	0	0	0	0	2	13%
Pedestrian	1	0	0	0	0	1	6%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	6	5	1	1	3	16	100%



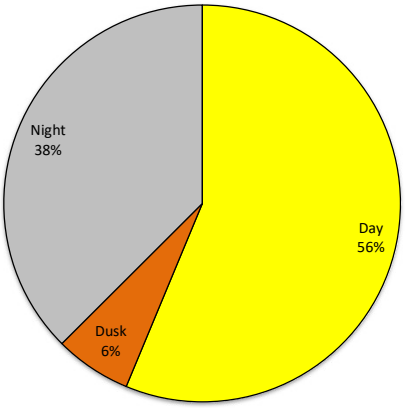
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	0	0	0	0	0	0%
Injury - Min	2	1	0	0	1	4	25%
Property Damage	4	4	1	1	2	12	75%
Total	6	5	1	1	3	16	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	5	4	1	1	1	12	75%
Wet Surface	1	0	0	0	2	3	19%
Snow	0	1	0	0	0	1	6%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	6	5	1	1	3	16	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	0	0	0	0%
Day	2	3	0	1	3	9	56%
Dusk	1	0	0	0	0	1	6%
Night	3	2	1	0	0	6	38%
Unknown	0	0	0	0	0	0	0%
Total	6	5	1	1	3	16	100%

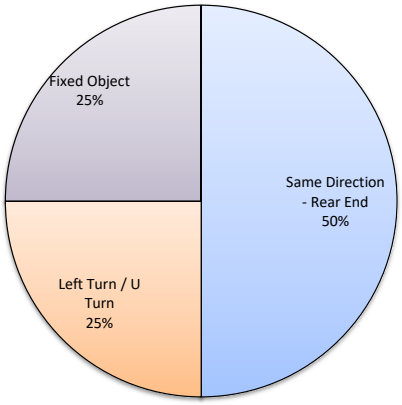


DYNAMIC TRAFFIC

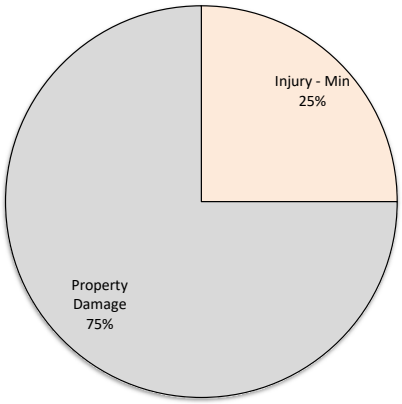
Location:	Hemion Road (CR 93) & Montebello Road (CR 64)
Town, County, State:	Village of Montebello, Rockland County, NY
DT #:	3709-99-004T
Time Period	January 2018 - July 2022

Crash Analysis

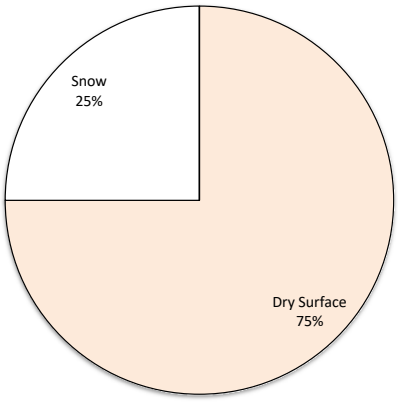
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	2	0	0	0	0	2	50%
Same Direction - Sideswipe	0	0	0	0	0	0	0%
Angle	0	0	0	0	0	0	0%
Head On	0	0	0	0	0	0	0%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	0	0	1	0	0	1	25%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	0	0	1	0	0	1	25%
Animal	0	0	0	0	0	0	0%
Pedestrian	0	0	0	0	0	0	0%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	2	0	2	0	0	4	100%



Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	0	0	0	0	0	0%
Injury - Min	0	0	1	0	0	1	25%
Property Damage	2	0	1	0	0	3	75%
Total	2	0	2	0	0	4	100%



Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	2	0	1	0	0	3	75%
Wet Surface	0	0	0	0	0	0	0%
Snow	0	0	1	0	0	1	25%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	2	0	2	0	0	4	100%



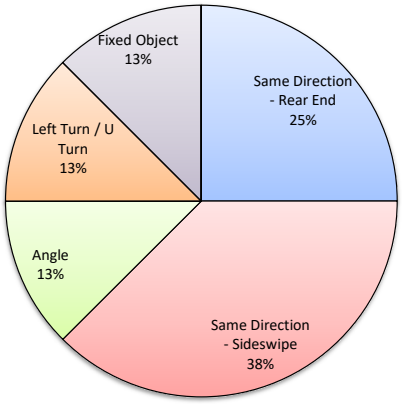
Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	0	0	0	0%
Day	2	0	2	0	0	4	100%
Dusk	0	0	0	0	0	0	0%
Night	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Total	2	0	2	0	0	4	100%

DYNAMIC TRAFFIC

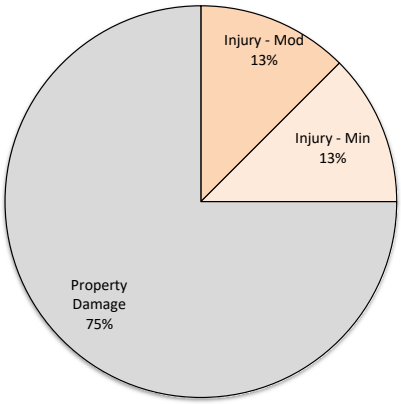
Location:	Airmont Rd (CR 89) & Dunnigan Drive
Town, County, State:	Village of Airmont, Rockland County, NY
DT #:	3709-99-004T
Time Period	January 2018 - July 2022

Crash Analysis

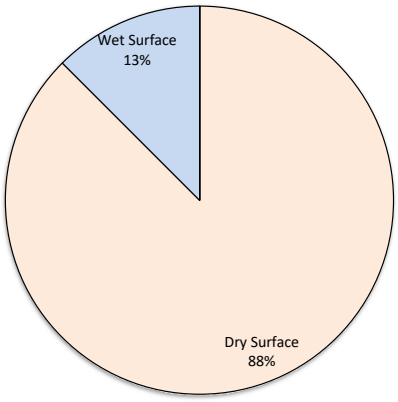
Crash Type	2018	2019	2020	2021	2022	Total	%
Same Direction - Rear End	1	1	0	0	0	2	25%
Same Direction - Sideswipe	2	1	0	0	0	3	38%
Angle	1	0	0	0	0	1	13%
Head On	0	0	0	0	0	0	0%
Parked Vehicle	0	0	0	0	0	0	0%
Left Turn / U Turn	1	0	0	0	0	1	13%
Backing	0	0	0	0	0	0	0%
Encroachment	0	0	0	0	0	0	0%
Overturned	0	0	0	0	0	0	0%
Fixed Object	1	0	0	0	0	1	13%
Animal	0	0	0	0	0	0	0%
Pedestrian	0	0	0	0	0	0	0%
Pedalcycle	0	0	0	0	0	0	0%
Non-Fixed Object	0	0	0	0	0	0	0%
Railcar - Vehicle	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	6	2	0	0	0	8	100%



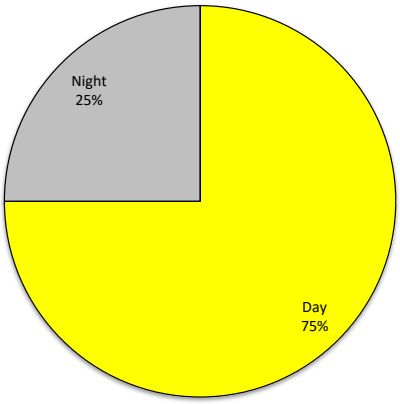
Severity	2018	2019	2020	2021	2022	Total	%
Fatal	0	0	0	0	0	0	0%
Injury - Maj	0	0	0	0	0	0	0%
Injury - Mod	0	1	0	0	0	1	13%
Injury - Min	1	0	0	0	0	1	13%
Property Damage	5	1	0	0	0	6	75%
Total	6	2	0	0	0	8	100%

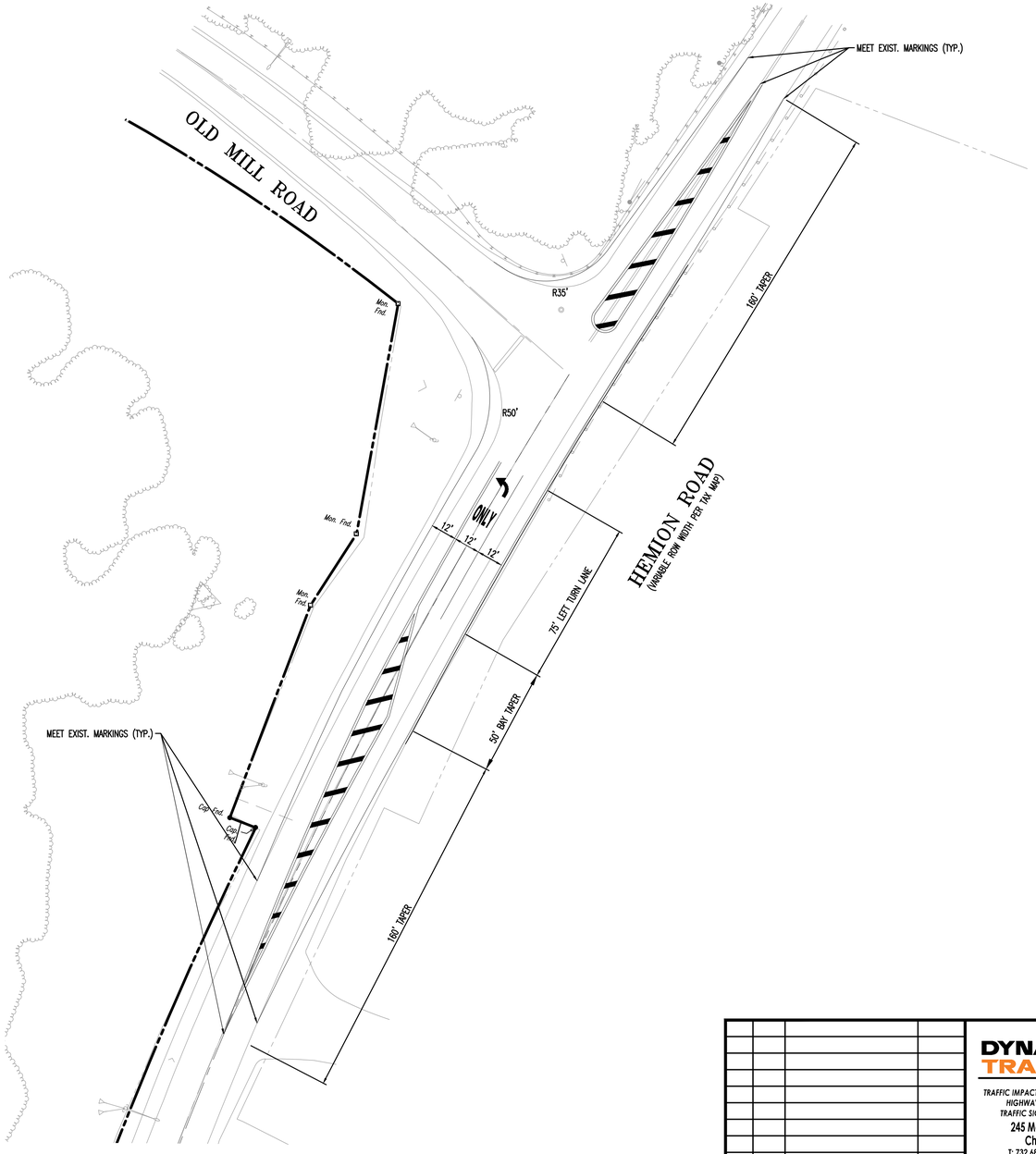


Surface Condition	2018	2019	2020	2021	2022	Total	%
Dry Surface	6	1	0	0	0	7	88%
Wet Surface	0	1	0	0	0	1	13%
Snow	0	0	0	0	0	0	0%
Ice	0	0	0	0	0	0	0%
Unkonwn	0	0	0	0	0	0	0%
Other	0	0	0	0	0	0	0%
Total	6	2	0	0	0	8	100%



Light Condition	2018	2019	2020	2021	2022	Total	%
Dawn	0	0	0	0	0	0	0%
Day	4	2	0	0	0	6	75%
Dusk	0	0	0	0	0	0	0%
Night	2	0	0	0	0	2	25%
Unknown	0	0	0	0	0	0	0%
Total	6	2	0	0	0	8	100%





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GRAPHIC SCALE

-30 0 15 30 60 120

(IN FEET)
1 INCH = 30 FT.

C-1
C-4

REV	DATE	COMMENTS	BY

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CONCEPTUAL IMPROVEMENT PLAN

PROPOSED INDUSTRIAL PARK AT 25 OLD MILL ROAD

SECTION 55.22 BLOCK 1, LOT 1
OLD MILL ROAD & HEMION ROAD (CR 9J)
VILLAGE OF SUFFERN, ROCKLAND COUNTY, NEW YORK

SCALE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
1"=30'	ARF	ARF	KMS

PROJECT NUMBER:	DATE:	REV. #:
3709-99-0041	06/16/2023	0

SHEET NUMBER: 1 OF 4

Plotted: 06/16/23 - 3:24 PM, By: ksavage, - Product Ver: 24.2s (LMS Tech)
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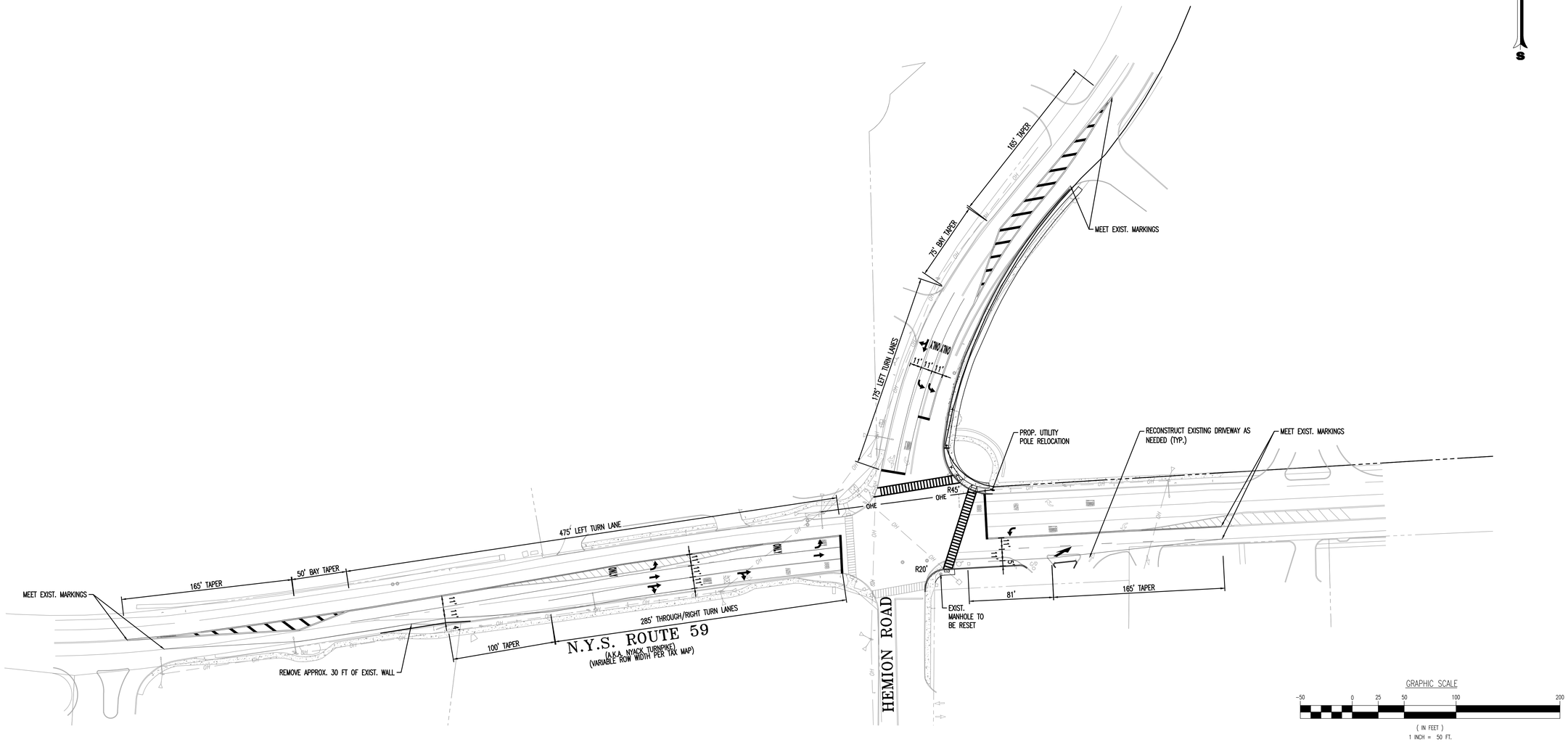

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IV2 ROCKLAND LOGISTICS, LLC

CONCEPTUAL IMPROVEMENT PLAN

PROPOSED INDUSTRIAL PARK AT 25 OLD MILL ROAD

SECTION 55.22 BLOCK 1, LOT 1
OLD MILL ROAD & HEMION ROAD (CR 93)
VILLAGE OF SUFFERN, ROCKLAND COUNTY, NEW YORK

SCALE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
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PROJECT NUMBER:	DATE:	REV. #:
3709-99-0041	06/16/2023	0

SHEET NUMBER: 2 OF 4

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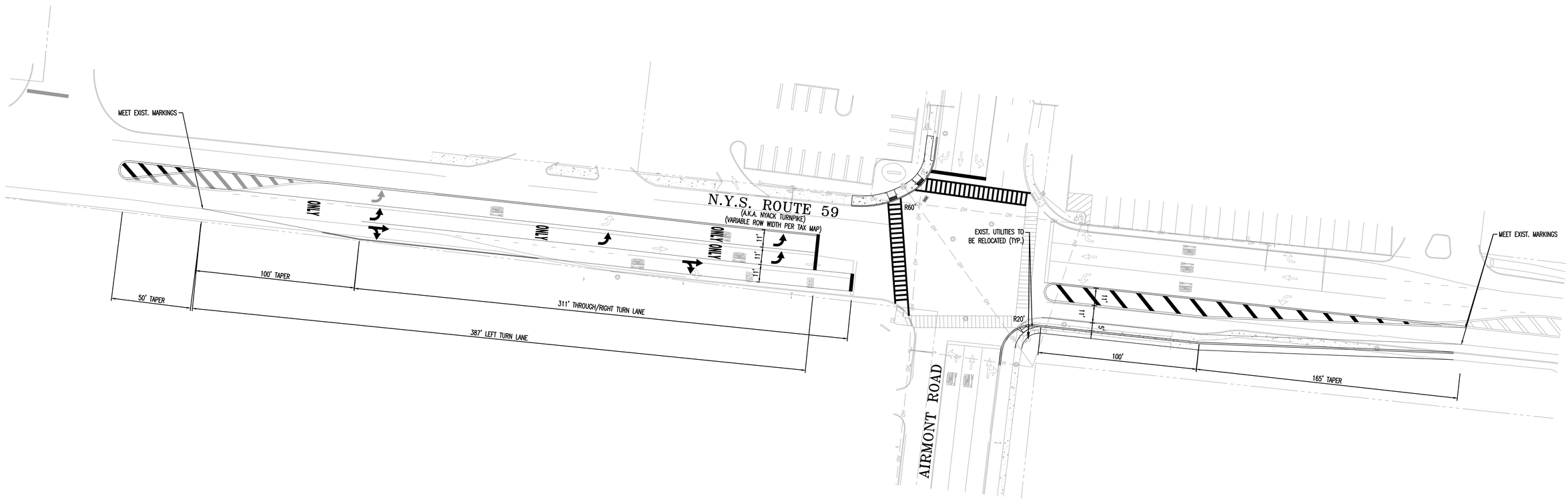

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Chester, NJ 07930
T: 732.681.0760 | F: 908.879.0222
www.dynamictraffic.com

COREY M. CHASE
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 093631

KEVIN M. SAVAGE
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IV2 ROCKLAND LOGISTICS, LLC

CONCEPTUAL IMPROVEMENT PLAN
PROPOSED INDUSTRIAL PARK AT 25 OLD MILL ROAD

SECTION 55.22 BLOCK 1, LOT 1
OLD MILL ROAD & HEMION ROAD (CR 93)
VILLAGE OF SUFFERN, ROCKLAND COUNTY, NEW YORK

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3709-99-0047	06/16/2023	0

SHEET NUMBER: 3 OF 4

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C-4

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CONCEPTUAL IMPROVEMENT PLAN
PROPOSED INDUSTRIAL PARK AT 25 OLD MILL ROAD
SECTION 55.22 BLOCK 1, LOT 1
OLD MILL ROAD & HEMION ROAD (CR 93)
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COREY M. CHASE
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 093631

KEVIN M. SAVAGE
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 105693

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PROJECT NUMBER:	DATE:	REV. #:
3709-99-004T	06/16/2023	0

SHEET NUMBER: 4 OF 4

Plotted: 06/16/23 – 11:59 AM, By: aferrante, – Product Ver: 24.2a (LMS Tech)
File: T:\TRAFFIC PROJECTS\3709 Brookfield Properties\99-004T Suffern NY\Dwg\Concept\2023-06-16 Conceptual Improvement Plans\3709990040C0.dwg, ---> 04 CONCEPTUAL IMPROVEMENT PLAN – HEMION RD & MONTEBELLO RD

Dynamic Traffic, LLC
245 Main Street, Suite 110
Chester, NJ 07930
T. 732.681.0760

August 12, 2022
Via Email

William Pasik
Brookfield Properties
1 Meadowlands Plaza
Suite 301
East Rutherford, NJ 07073

RE: Construction Traffic Impact Letter Report
Proposed Industrial Park
Old Mill Road & Hemion Road (CR 93)
Section 55.22 Block 1, Lot 1
Village of Suffern, Rockland County, NY
DT#: 3709-99-004T

Dear Mr. Pasik:

Dynamic Traffic has prepared the following assessment to determine the traffic impact of construction vehicles associated with the redevelopment of the former Novartis pharmaceutical complex, located along Hemion Road (CR 93) north of Lafayette Avenue (NYS Route 59) in the Village of Suffern, Rockland County, New York (see Figure 1). The site is designated as Section 55.22 Block 1 - Lot 1 on the Village Tax Maps. It is proposed to demolish the existing complex and construct an industrial park with three (3) warehouse buildings totaling 1,221,800 SF, with Building 1 consisting of 963,100 SF, Building 2 consisting of 170,500 SF and Building 3 consisting of 88,200 SF ("The Project"). Access to the site is currently provided via a full movement driveway at the southern end of the site along Hemion Road (CR 93) and a full movement driveway at the northern end of the site along Old Mill Road, which ultimately connects to Hemion Road (CR 93). It is proposed to close the existing access points along Old Mill Road and reconstruct the existing access point along Hemion Road (CR 93) with trucks restricted to left-in/right-in/right-out movements.

Dynamic Traffic LLC has been retained to prepare this study to assess the traffic impact associated with construction vehicles during the construction of The Project on the adjacent roadway network.

Existing Conditions

Lafayette Avenue (NYS Route 59) is an Urban Principal Arterial roadway under NYSDOT jurisdiction with a general east/west orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided intermittently along both sides of the roadway. Lafayette Avenue provides a slightly curved horizontal alignment west of Hemion Road with a downgrade from east to west. The land uses along Lafayette Avenue in the vicinity of The Project are mixed commercial and residential.

Hemion Road (CR 93) is an Urban Major Collector roadway under Rockland County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are only provided intermittently near the intersection of Campbell Avenue/Hemion Road and Lafayette Avenue (NYS Route 59). Hemion Road provides a curved horizontal alignment with an upgrade from north to south. The land uses along Hemion Road in the vicinity of The Project are primarily industrial.

Airmont Road (CR 89) is an Urban Minor Arterial roadway under Rockland County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides two travel lanes in each direction north of Lafayette Avenue (NYS Route 59) and one travel lane in each direction south of Lafayette Avenue (NYS Route 59). On-street parking is not provided along either side of the roadway. Curb and sidewalk are provided along both sides of the roadway. Airmont Road provides a curved horizontal alignment and a rolling vertical alignment. The land uses along Airmont Road in the vicinity of The Project are primarily commercial.

Campbell Avenue is an Urban Minor Arterial roadway under municipal jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided along the northbound side of the roadway. Campbell Avenue provides a curved horizontal alignment with a downgrade from north to south. The land uses along Campbell Avenue in the vicinity of The Project are primarily residential.

North DeBaun Avenue is a local roadway under private jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is not posted and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided along the westbound side of the roadway. North DeBaun Avenue provides a straight horizontal alignment and a flat vertical alignment. The land uses along North DeBaun Avenue are a mix of commercial, office, and lodging.

Brookside Avenue is a local roadway under municipal jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are not provided along either side of the roadway. Brookside Avenue provides a straight horizontal alignment with an upgrade from north to south. The land uses along Brookside Avenue are primarily residential.

Site Generated Construction Traffic

During the construction of The Project, there is anticipated to be 300,000 cubic yards (CY) of imported fill per day. Based on construction estimates, this will require 100 trucks a day, which are assumed to arrive to the site spread throughout the ten-hour workday, which equates to an average of 10 trucks per hour. In an effort to remain conservative, 20 trucks were assumed to arrive and depart during the peak hour. The following table shows the anticipated construction vehicle trip generation for The Project.

Table I
Construction Vehicle Trip Generation

AM PSH			PM PSH		
In	**Out**	**Total**	**In**	**Out**	**Total**
20	20	40	20	20	40

As can be seen above, the proposed site is projected to conservatively generate 40 construction vehicle trips during the weekday morning and weekday evening peak hours during construction. It should be noted that the number of new trips falls below the industry accepted standard of a significant increase in traffic of 100 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE "it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways' peak hour or the development's peak hour." Hence, it is not anticipated that the roadway construction will result in a significant degradation of operating conditions.

Trip Distribution

Once the magnitude of the site generated construction traffic is known, it is necessary to assign the traffic to the adjacent street system. The distribution of the construction site traffic is based upon the location of local quarries. The closest two quarries are located in West Nyack, NY to the east of the site, therefore all trips were assumed to travel to the site via I-287/I-87 Westbound and travel from the site via I-287/I-87 Eastbound. The trips were then routed to/from the site via Airmont Road (CR 89) and Lafayette Avenue (NYS Route 59) due to the weight restriction along Montebello Road (CR 64).

Future Traffic Volumes

Existing and Future traffic volumes were obtained from the *Traffic Impact Study* prepared by this firm, dated August 11, 2022. The Future No-Build Volumes are shown on Figure 2. The Construction Traffic Distribution and Construction Site-Generated Trips are shown on Figures 3 and 4, respectively. The Construction Site-Generated Trips were added to the Future No-Build volumes to generate the Construction Volumes, which are shown on Figure 5.

Capacity Analysis

Operational conditions at the study intersections were analyzed under the No Build and Construction conditions and are summarized in Table II.

Table II
Construction Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH				PM PSH			
			No Build		Construction		No Build		Construction	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (115)	1.09	F (115)	1.09	E (75)	0.96	E (76)	0.96
		T	E (80)	1.02	E (80)	1.02	D (37)	0.81	D (37)	0.81
		R	A (1)	0.08	A (1)	0.08	A (1)	0.12	A (1)	0.12
	WB	L	D (44)	0.74	D (44)	0.74	B (17)	0.35	B (17)	0.36
		T	F (100)	1.09	F (100)	1.09	E (74)	1.03	E (75)	1.04
		R	A (1)	0.13	A (3)	0.19	A (1)	0.12	A (2)	0.16
	NB	L	D (38)	0.67	D (38)	0.67	D (38)	0.66	D (38)	0.67
		TR	D (44)	0.69	D (44)	0.70	E (68)	0.91	E (69)	0.91
	SB	L	C (31)	0.58	D (42)	0.73	D (41)	0.71	E (57)	0.86
		TR	E (57)	0.89	E (57)	0.89	F (134)	1.16	F (130)	1.15
	Overall		**E (68)**	**1.09**	**E (68)**	**1.09**	**E (62)**	**1.16**	**E (63)**	**1.15**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (131)	1.15	F (167)	1.24	F (194)	1.30	F (237)	1.41
		T	D (44)	0.45	D (44)	0.60	D (47)	0.67	D (47)	0.67
		R	A (1)	0.03	A (1)	0.03	A (2)	0.10	A (2)	0.10
	WB	L	D (39)	0.22	D (39)	0.34	D (40)	0.51	D (40)	0.51
		T	E (68)	0.39	E (39)	0.81	E (72)	0.87	E (72)	0.87
		R	D (36)	0.71	D (36)	0.71	D (37)	0.82	D (37)	0.82
	NB	L	C (25)	0.09	E (68)	0.09	D (47)	0.22	D (47)	0.22
		TR	E (57)	0.78	E (57)	0.78	E (61)	0.74	E (61)	0.74
	SB	L	F (172)	1.24	F (172)	1.24	F (105)	1.03	F (105)	1.03
		T	F (86)	0.42	F (86)	0.90	F (96)	1.01	F (96)	1.01
		R	A (6)	0.60	A (7)	0.64	B (14)	0.72	B (16)	0.76
	Overall		**E (74)**	**1.24**	**E (79)**	**1.24**	**E (74)**	**1.30**	**E (80)**	**1.41**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (21)	0.65	C (21)	0.65	C (25)	0.65	C (25)	0.65
		R	D (44)	0.93	D (44)	0.93	C (34)	0.88	C (34)	0.88
	NB	T	C (27)	0.65	C (27)	0.65	C (20)	0.58	C (20)	0.58
		R	F (282)	1.54	F (319)	1.63	F (133)	1.21	F (161)	1.28
	SB	L	D (37)	0.78	D (37)	0.78	C (32)	0.80	C (32)	0.80
		T	C (23)	0.47	C (23)	0.49	A (9)	0.52	A (9)	0.54
	Overall		**F (82)**	**1.54**	**F (91)**	**1.63**	**D (41)**	**1.21**	**D (47)**	**1.28**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	D (42)	0.78	D (46)	0.89	C (34)	0.64	C (35)	0.80
		LT	D (42)	0.78	D (46)	0.89	C (34)	0.65	D (35)	0.81
		R	C (28)	0.72	C (26)	0.77	B (20)	0.64	B (19)	0.73
	NB	L	F (245)	1.46	F (257)	1.49	E (73)	1.05	E (73)	1.05
		T	B (11)	0.54	B (12)	0.55	A (4)	0.37	A (4)	0.37
	SB	T	C (25)	0.69	C (27)	0.35	D (44)	0.87	D (42)	0.89
		R	A (7)	0.51	A (9)	0.35	B (20)	0.63	B (20)	0.63
	Overall		**D (46)**	**1.46**	**D (49)**	**1.49**	**C (31)**	**1.05**	**C (33)**	**1.05**

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table II (continued)
Construction Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH				PM PSH			
			No Build		Construction		No Build		Construction	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (34)	0.39	C (34)	0.39	C (33)	0.36	C (33)	0.36
	WB	LTR	C (30)	0.14	C (30)	0.14	C (34)	0.45	C (34)	0.45
	NB	L	A (5)	0.10	A (5)	0.10	A (7)	0.12	A (7)	0.12
		TR	A (10)	0.62	B (10)	0.64	B (13)	0.67	B (14)	0.69
	SB	L	A (6)	0.07	A (6)	0.07	A (7)	0.17	A (8)	0.17
		TR	A (10)	0.56	A (10)	0.57	B (11)	0.64	B (12)	0.65
	Overall		**B (11)**	**0.62**	**B (11)**	**0.64**	**B (14)**	**0.67**	**B (14)**	**0.69**
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	a (10)	0.094	a (10)	0.096	b (12)	0.251	b (12)	0.255
	NB	LR	c (17)	0.347	c (18)	0.356	d (26)	0.467	d (27)	0.479
Hemion Road (CR 93) & Site Driveway	EB	L	-	-	c (17)	0.081	-	-	c (16)	0.064
	NB	LR	-	-	b (11)	0.045	-	-	b (11)	0.037

As seen in Table II above, the overall impacts of construction traffic are anticipated to be minimal. The proposed signal timing modifications at the intersections along the truck route would mitigate the largest impacts to traffic operations at the intersections. It is recommended to conduct the proposed signal timing modifications prior to the beginning of site construction to accommodate the increase in construction traffic.

Conclusion

Based upon our Traffic Impact Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of the Village of Suffern, Village of Montebello, Village of Airmont, Rockland County, and NYSDOT will not experience any significant degradation in operating conditions during the construction of the site. Conducting the proposed signal timing modifications prior to the beginning of site construction would mitigate the increase in construction traffic.

If you have any questions on the above, please do not hesitate to contact our office.

Sincerely,

Dynamic Traffic, LLC

Corey Chase, PE
Principal
NY PE License 93631

Kevin Savage, PE, PTOE
Project Manager
NY PE License 105693

JTT
Enclosures

c: Joshua M. Sewald, PE, PP (via email w/enclosure)
Darius Chafizadeh (via email w/ enclosure)
Gina Martini, AICP, ENV SP (via email w/enclosure)
Jim Wyatt, LEED AP BD+C (via email w/enclosure)
Greg Fleischer, PWS (via email w/enclosure)

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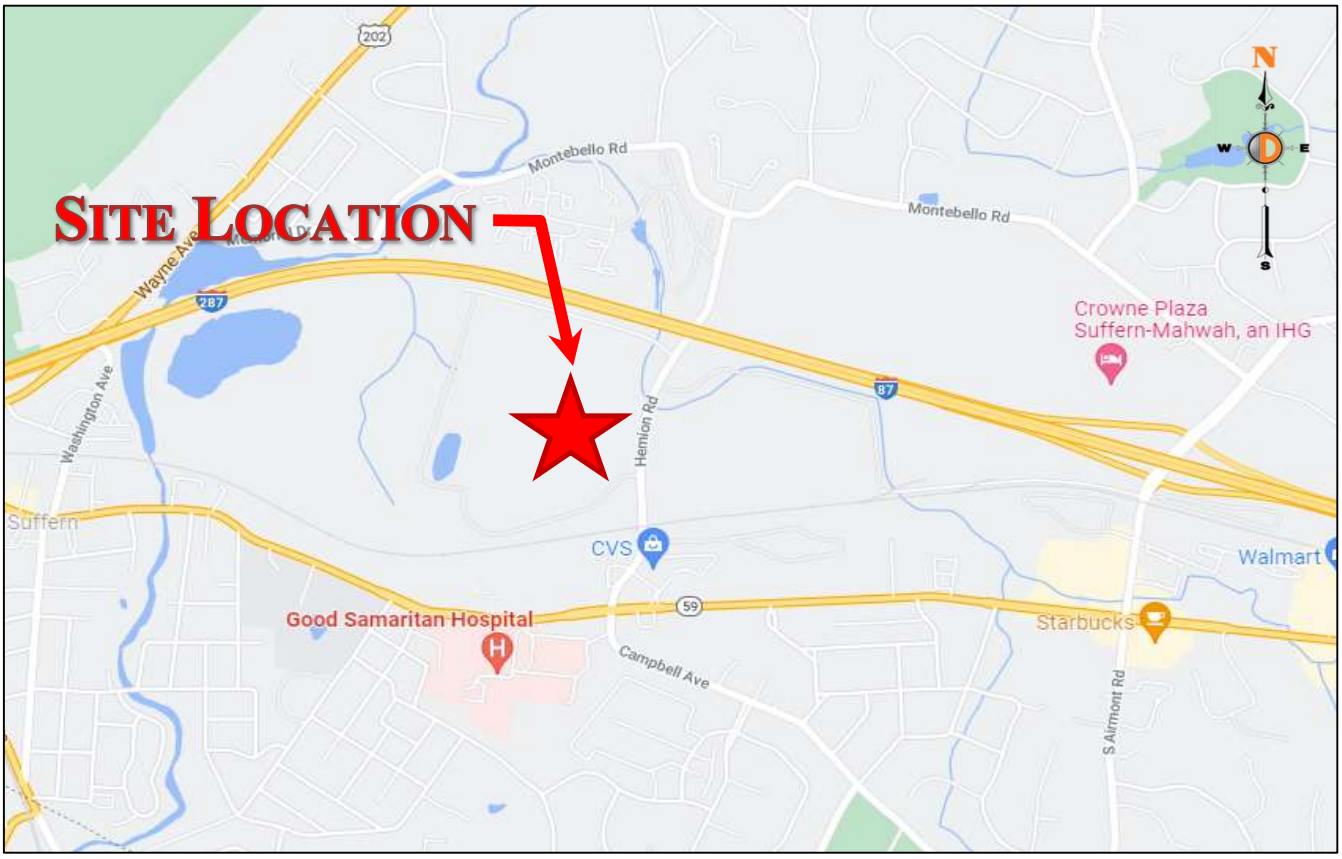
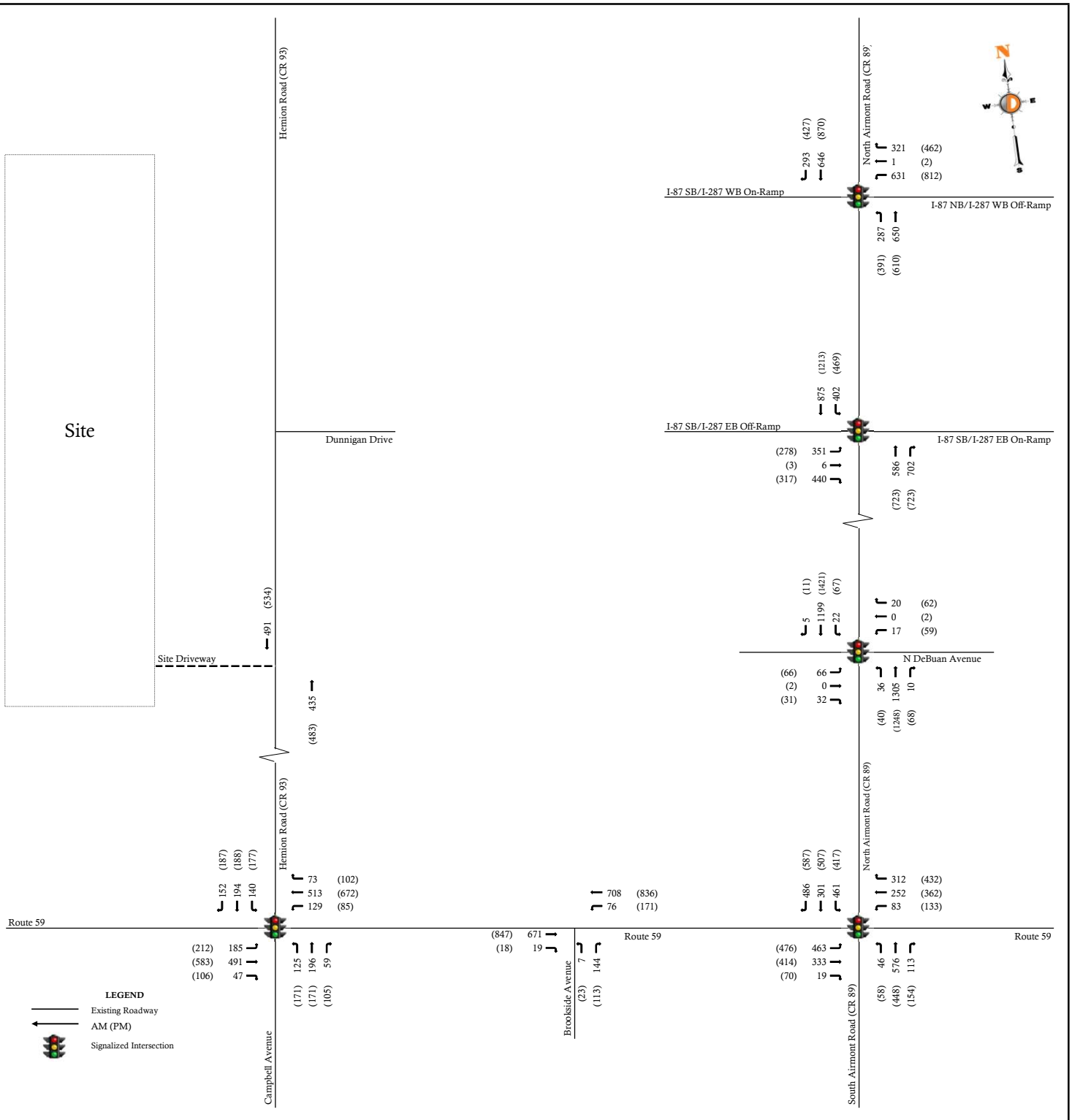


Proposed Industrial Park
Construction Traffic Impact Letter Report
3709-99-004T

Figure 1

Site Location Map



Proposed Industrial Park
Construction Traffic Impact Letter Report
3709-99-004T

Figure 2

No Build Traffic Volumes

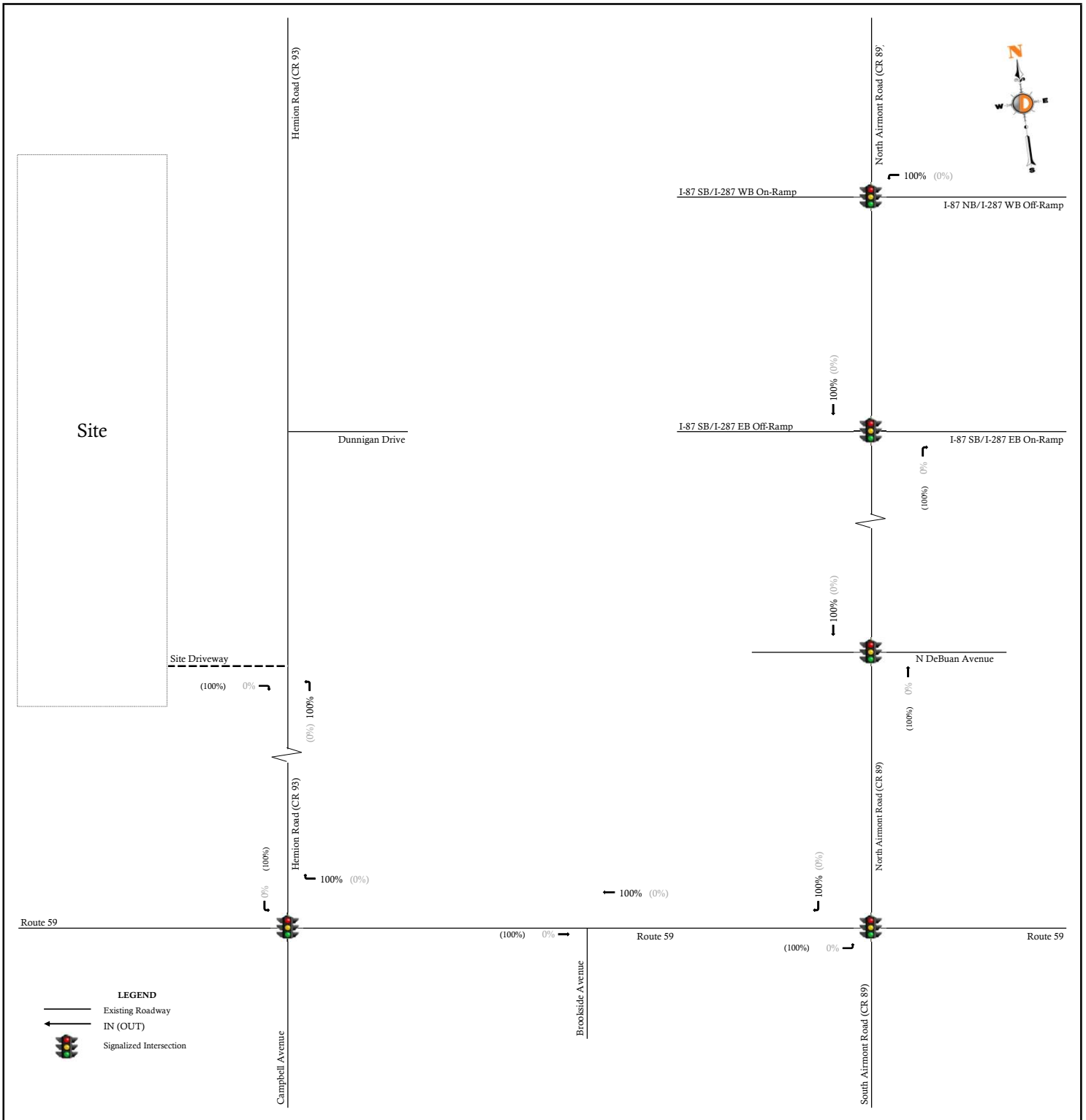


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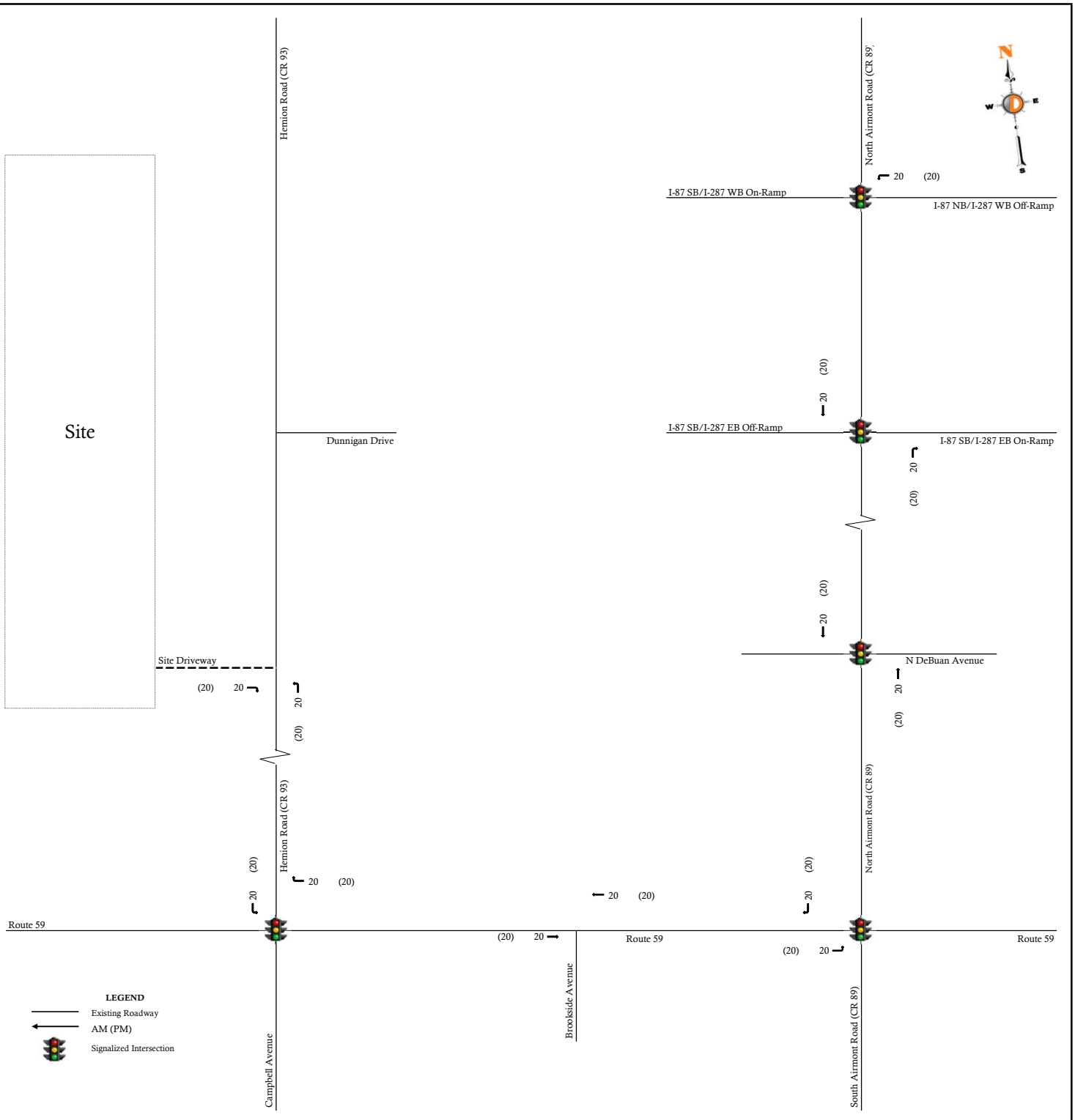
Figure 3

Percent Distribution (Truck Trips)



Proposed Industrial Park
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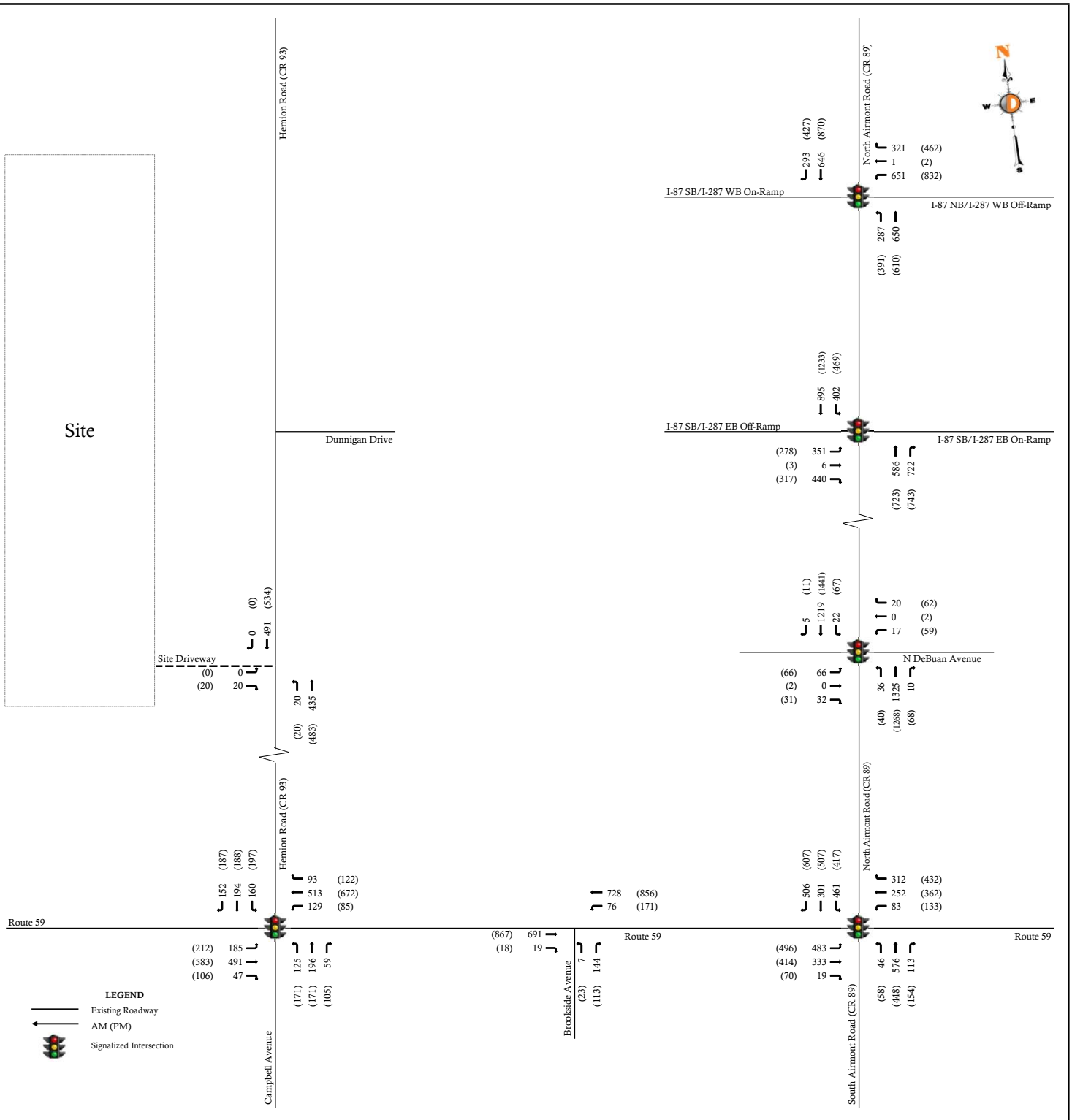
3709-99-004T

Figure 4

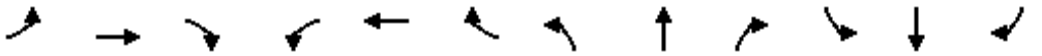
Truck Site Generated Trips



Proposed Industrial Park
Construction Traffic Impact Letter Report
3709-99-004T

Figure 11

Construction Traffic Volumes



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	491	47	129	513	73	125	196	59	140	194	152
Future Volume (vph)	185	491	47	129	513	73	125	196	59	140	194	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.965			0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1749	1432	1752	1727	1482	1901	1739	0	1745	1769	0
Flt Permitted	0.115			0.116			0.150			0.326		
Satd. Flow (perm)	203	1749	1432	214	1727	1445	300	1739	0	597	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			138		13			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	5%	9%	3%	10%	9%	6%	5%	11%	9%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	599	57	157	626	89	152	311	0	171	422	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.8	35.7	49.2	43.2	35.4	43.1	35.5	27.0		36.0	27.3	
Actuated g/C Ratio	0.41	0.33	0.46	0.40	0.33	0.40	0.33	0.25		0.34	0.26	

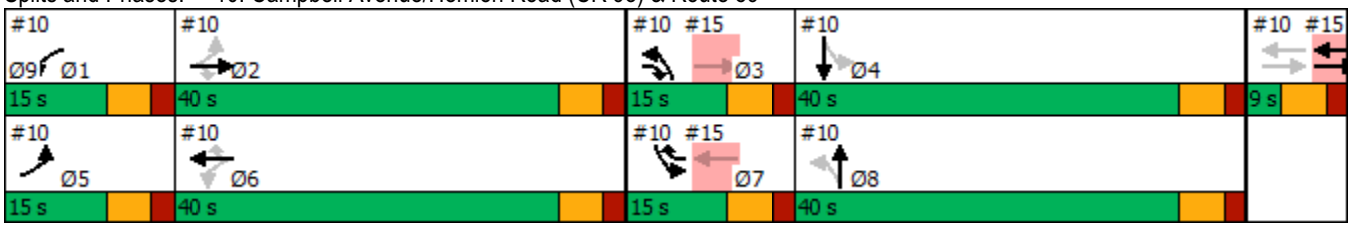
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.09	1.02	0.08	0.74	1.09	0.13	0.67	0.69		0.58	0.89	
Control Delay	114.5	79.8	0.2	43.8	100.4	1.3	37.7	43.5		31.4	56.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	114.5	79.8	0.2	43.8	100.4	1.3	37.7	43.5		31.4	56.8	
LOS	F	E	A	D	F	A	D	D		C	E	
Approach Delay		83.6			80.1			41.6			49.5	
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	~120	~437	0	59	~479	0	63	176		73	246	
Queue Length 95th (ft)	#282	#580	0	#149	#657	2	108	262		122	354	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	208	585	742	218	573	673	237	568		301	592	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.09	1.02	0.08	0.72	1.09	0.13	0.64	0.55		0.57	0.71	

Intersection Summary

Area Type: Other
Cycle Length: 119
Actuated Cycle Length: 106.7
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 68.4 Intersection LOS: E
Intersection Capacity Utilization 83.7% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

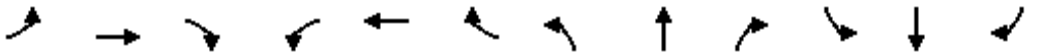
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	463	333	19	83	252	312	46	576	113	461	301	486
Future Volume (vph)	463	333	19	83	252	312	46	576	113	461	301	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1792	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1422
Flt Permitted	0.152			0.556			0.261			0.127		
Satd. Flow (perm)	287	1724	1168	1060	1761	1299	427	3343	0	221	1627	1422
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				416
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	472	340	19	85	257	318	47	703	0	470	307	496
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	56.5	48.8	81.9	29.7	27.0	51.5	73.0	40.1		61.5	31.4	61.5
Actuated g/C Ratio	0.38	0.33	0.55	0.20	0.18	0.34	0.49	0.27		0.41	0.21	0.41
v/c Ratio	1.15	0.60	0.03	0.34	0.81	0.71	0.09	0.78		1.24	0.90	0.60
Control Delay	131.1	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	6.1

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	131.1	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	6.1
LOS	F	D	A	D	E	D	C	E		F	F	A
Approach Delay		92.4			48.6			55.3			86.6	
Approach LOS		F			D			E			F	
Queue Length 50th (ft)	~449	270	0	49	238	129	22	322		~510	293	27
Queue Length 95th (ft)	#801	319	0	105	234	230	54	452		#793	409	81
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	412	760	685	395	658	447	501	906		380	732	830
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.15	0.45	0.03	0.22	0.39	0.71	0.09	0.78		1.24	0.42	0.60

Intersection Summary

Area Type: Other

Cycle Length: 190

Actuated Cycle Length: 149.3

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 74.1 Intersection LOS: E

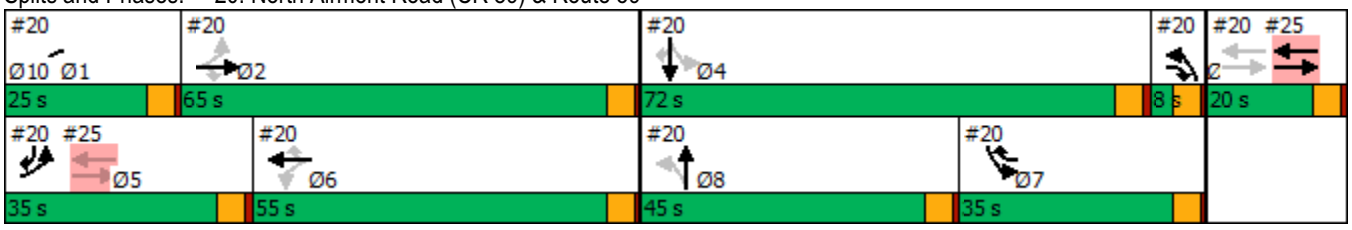
Intersection Capacity Utilization 100.6% ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

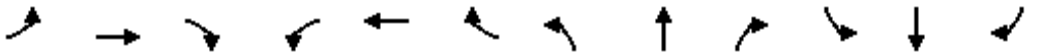
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

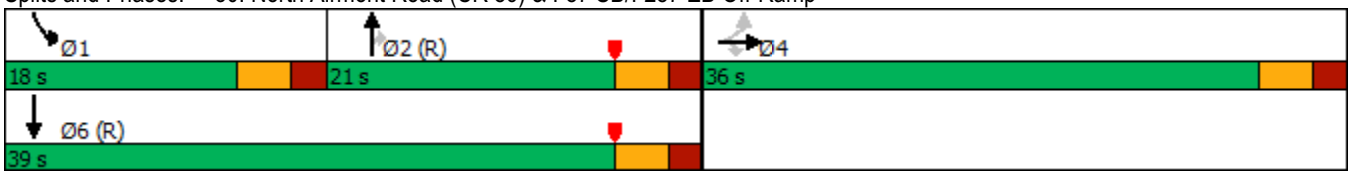


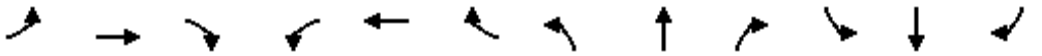
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	351	6	440	0	0	0	0	586	702	402	875	0
Future Volume (vph)	351	6	440	0	0	0	0	586	702	402	875	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						582			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	4%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	361	444	0	0	0	0	592	709	406	884	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		24.5	24.5					23.4	23.4	12.1	40.5	
Actuated g/C Ratio		0.33	0.33					0.31	0.31	0.16	0.54	
v/c Ratio		0.71	0.87					0.62	0.78	0.71	0.47	
Control Delay		29.2	35.3					23.0	15.4	32.0	9.0	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		29.2	35.3					23.0	15.4	32.0	9.0	
LOS		C	D					C	B	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		32.6						18.9			16.3	
Approach LOS		C						B			B	
Queue Length 50th (ft)		140	145					130	132	68	50	
Queue Length 95th (ft)		206	241					#229	#245	m116	176	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					948	909	609	1885	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.56	0.72					0.62	0.78	0.67	0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	6	440	0	0	0	0	586	702	402	875	0
Future Volume (veh/h)	351	6	440	0	0	0	0	586	702	402	875	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1859	2067	2007	0
Adj Flow Rate, veh/h	355	6	444				0	592	709	406	884	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	4	2	6	0
Cap, veh/h	543	9	477				0	917	459	522	1887	0
Arrive On Green	0.37	0.37	0.37				0.00	0.29	0.29	0.05	0.16	0.00
Sat Flow, veh/h	1462	25	1284				0	3226	1576	3818	3913	0
Grp Volume(v), veh/h	361	0	444				0	592	709	406	884	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1576	1909	1906	0
Q Serve(g_s), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	15.8	0.0
Cycle Q Clear(g_c), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	15.8	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	477				0	917	459	522	1887	0
V/C Ratio(X)	0.65	0.00	0.93				0.00	0.65	1.54	0.78	0.47	0.00
Avail Cap(c_a), veh/h	615	0	531				0	917	459	662	1887	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.58	0.58	0.00
Uniform Delay (d), s/veh	19.6	0.0	22.6				0.0	23.2	26.6	34.7	22.4	0.0
Incr Delay (d2), s/veh	1.5	0.0	21.0				0.0	3.5	255.1	2.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	0.0	14.8				0.0	8.4	62.7	6.5	11.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	43.6				0.0	26.7	281.7	36.7	22.9	0.0
LnGrp LOS	C	A	D				A	C	F	D	C	A
Approach Vol, veh/h		805						1301			1290	
Approach Delay, s/veh		33.5						165.7			27.2	
Approach LOS		C						F			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.3	26.9		32.9		42.1						
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0						
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0						
Max Q Clear Time (g_c+I1), s	9.9	0.0		26.9		0.0						
Green Ext Time (p_c), s	0.4	0.0		1.0		0.0						

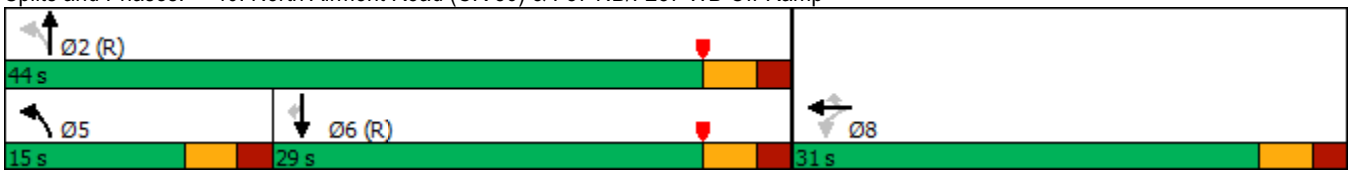
Intersection Summary												
HCM 6th Ctrl Delay			81.8									
HCM 6th LOS			F									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	631	1	321	287	650	0	0	646	293
Future Volume (vph)	0	0	0	631	1	321	287	650	0	0	646	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1603	1606	1553	1355	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.149					
Satd. Flow (perm)	0	0	0	1603	1606	1553	212	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						113						401
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	7%	0%	4%	23%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	432	433	440	393	890	0	0	885	401
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				23.5	23.5	23.5	41.5	41.5			26.5	26.5
Actuated g/C Ratio				0.31	0.31	0.31	0.55	0.55			0.35	0.35
v/c Ratio				0.86	0.86	0.78	1.46	0.54			0.69	0.51
Control Delay				42.2	42.3	27.5	244.9	11.4			24.8	7.3
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

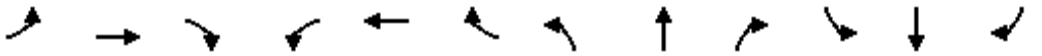
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				42.2	42.3	27.5	244.9	11.4			24.8	7.3
LOS				D	D	C	F	B			C	A
Approach Delay					37.3			82.9			19.3	
Approach LOS					D			F			B	
Queue Length 50th (ft)				186	186	130	~226	150			132	9
Queue Length 95th (ft)				221	221	161	#287	152			218	64
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				555	556	612	269	1648			1281	789
Starvation Cap Reductn				0	0	0	0	0			0	0
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.78	0.78	0.72	1.46	0.54			0.69	0.51

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.46			
Intersection Signal Delay: 46.4		Intersection LOS: D	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	0	32	17	0	20	36	1305	10	22	1199	5
Future Volume (vph)	66	0	32	17	0	20	36	1305	10	22	1199	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.928			0.999			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1725	0	0	1676	0	1574	3321	0	1718	3290	0
Flt Permitted		0.774			0.880		0.140			0.131		
Satd. Flow (perm)	0	1379	0	0	1509	0	232	3321	0	237	3290	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		5.0			12.6			4.2			3.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	5%	0%	0%	8%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	109	0	0	41	0	40	1461	0	24	1338	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.5			11.5		56.7	53.5		55.9	50.7	
Actuated g/C Ratio		0.15			0.15		0.76	0.71		0.75	0.68	
v/c Ratio		0.40			0.14		0.11	0.62		0.06	0.60	
Control Delay		16.3			3.8		3.9	11.2		3.0	8.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.3			3.8		3.9	11.2		3.0	8.5	
LOS		B			A		A	B		A	A	
Approach Delay		16.3			3.8			11.0			8.4	
Approach LOS		B			A			B			A	
Queue Length 50th (ft)		15			0		4	117		2	175	
Queue Length 95th (ft)		55			11		13	#415		m5	213	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		421			455		373	2368		395	2223	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.26			0.09		0.11	0.62		0.06	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 9.9 Intersection LOS: A

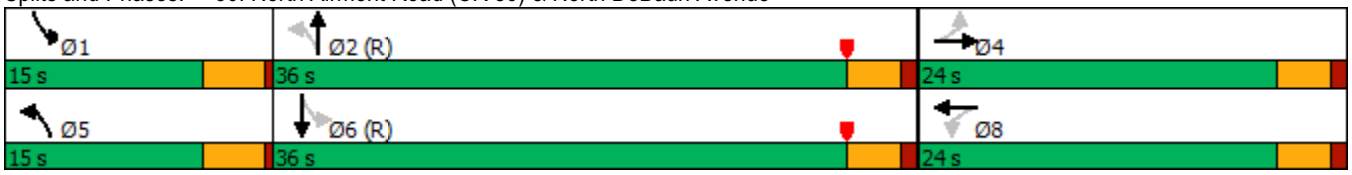
Intersection Capacity Utilization 51.5% ICU Level of Service A

Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

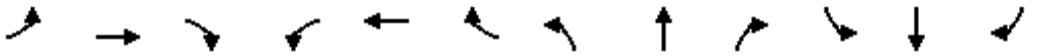
Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	0	32	17	0	20	36	1305	10	22	1199	5
Future Volume (veh/h)	66	0	32	17	0	20	36	1305	10	22	1199	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1826	1900	2057	1937	1682
Adj Flow Rate, veh/h	73	0	36	19	0	22	40	1450	11	24	1332	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	5	0	0	8	25
Cap, veh/h	199	16	67	147	24	117	397	2329	18	368	2394	11
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.66	0.66	0.05	0.64	0.64
Sat Flow, veh/h	934	128	524	601	192	918	1711	3529	27	1959	3758	17
Grp Volume(v), veh/h	109	0	0	41	0	0	40	712	749	24	652	686
Grp Sat Flow(s),veh/h/ln	1586	0	0	1712	0	0	1711	1735	1821	1959	1840	1934
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.5	17.8	17.8	0.3	14.9	14.9
Cycle Q Clear(g_c), s	4.6	0.0	0.0	1.5	0.0	0.0	0.5	17.8	17.8	0.3	14.9	14.9
Prop In Lane	0.67		0.33	0.46		0.54	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	282	0	0	288	0	0	397	1145	1202	368	1173	1232
V/C Ratio(X)	0.39	0.00	0.00	0.14	0.00	0.00	0.10	0.62	0.62	0.07	0.56	0.56
Avail Cap(c_a), veh/h	495	0	0	506	0	0	519	1145	1202	552	1173	1232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.2	0.0	0.0	4.8	7.4	7.4	5.5	7.6	7.6
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.8	0.0	0.0	0.4	2.6	2.4	0.3	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	0.0	0.0	1.3	0.0	0.0	0.3	9.9	10.2	0.2	9.1	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	0.0	0.0	30.0	0.0	0.0	5.2	9.9	9.8	5.8	9.6	9.5
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		109			41			1501			1362	
Approach Delay, s/veh		33.6			30.0			9.7			9.4	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	53.5		13.6	9.7	51.8		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	19.8		6.6	2.5	16.9		3.5				
Green Ext Time (p_c), s	0.0	11.0		0.9	0.1	12.8		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		10.7	
HCM 6th LOS		B	

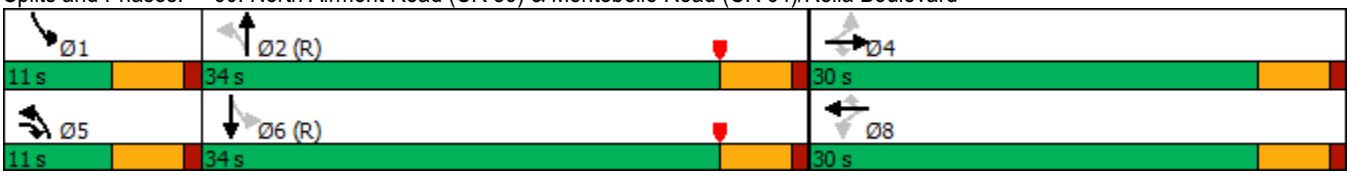


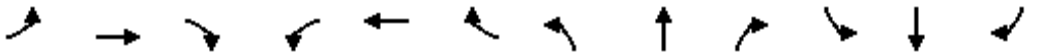
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	24	360	14	6	13	186	546	79	33	652	90
Future Volume (vph)	99	24	360	14	6	13	186	546	79	33	652	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.981			0.982	
Flt Protected		0.961		0.950			0.950			0.950		
Satd. Flow (prot)	0	1727	1433	1797	913	1242	1645	3224	0	1762	3448	0
Flt Permitted		0.764		0.655			0.246			0.387		
Satd. Flow (perm)	0	1373	1433	1239	913	1242	426	3224	0	718	3448	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91			102		25			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			781			587	
Travel Time (s)		15.5			12.2			17.8			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	137	400	16	7	14	207	695	0	37	824	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		13.4	26.5	13.4	13.4	13.4	54.3	48.6		44.7	38.5	
Actuated g/C Ratio		0.18	0.35	0.18	0.18	0.18	0.72	0.65		0.60	0.51	
v/c Ratio		0.56	0.71	0.07	0.04	0.05	0.42	0.33		0.07	0.46	
Control Delay		36.4	21.8	24.2	23.8	0.3	8.1	5.0		5.7	14.2	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.4	21.8	24.2	23.8	0.3	8.1	5.0		5.7	14.2	
LOS		D	C	C	C	A	A	A		A	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		25.5			15.1			5.8			13.8	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)		59	118	6	3	0	17	48		4	120	
Queue Length 95th (ft)		104	173	21	12	0	m53	83		16	211	
Internal Link Dist (ft)		602			368			701			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		457	566	413	304	482	488	2098		517	1779	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.30	0.71	0.04	0.02	0.03	0.42	0.33		0.07	0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 55 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 64.0%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	24	360	14	6	13	186	546	79	33	652	90
Future Volume (veh/h)	99	24	360	14	6	13	186	546	79	33	652	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	110	27	400	16	7	14	207	607	88	37	724	100
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	365	78	519	573	184	432	410	1367	198	512	1455	201
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.16	0.95	0.95	0.04	0.43	0.43
Sat Flow, veh/h	961	271	1405	1580	635	1492	1717	2879	416	1919	3378	466
Grp Volume(v), veh/h	137	0	400	16	7	14	207	346	349	37	410	414
Grp Sat Flow(s),veh/h/ln	1232	0	1405	1580	635	1492	1717	1642	1653	1919	1914	1931
Q Serve(g_s), s	6.1	0.0	18.8	0.0	0.6	0.5	5.3	1.4	1.4	0.8	11.6	11.7
Cycle Q Clear(g_c), s	6.6	0.0	18.8	0.5	0.6	0.5	5.3	1.4	1.4	0.8	11.6	11.7
Prop In Lane	0.80		1.00	1.00		1.00	1.00		0.25	1.00		0.24
Lane Grp Cap(c), veh/h	443	0	519	573	184	432	410	780	785	512	824	831
V/C Ratio(X)	0.31	0.00	0.77	0.03	0.04	0.03	0.51	0.44	0.45	0.07	0.50	0.50
Avail Cap(c_a), veh/h	497	0	581	643	212	497	410	780	785	597	824	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	20.8	19.1	19.1	19.1	10.5	1.0	1.0	10.9	15.5	15.5
Incr Delay (d2), s/veh	0.4	0.0	5.6	0.0	0.1	0.0	0.8	1.4	1.4	0.1	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	0.0	10.9	0.4	0.2	0.3	2.9	1.0	1.0	0.6	8.9	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	26.5	19.1	19.2	19.1	11.2	2.4	2.4	10.9	17.6	17.6
LnGrp LOS	C	A	C	B	B	B	B	A	A	B	B	B
Approach Vol, veh/h		537			37			902			861	
Approach Delay, s/veh		25.3			19.2			4.4			17.3	
Approach LOS		C			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	40.6		26.7	11.0	37.3		26.7				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	3.4		20.8	7.3	13.7		2.6				
Green Ext Time (p_c), s	0.0	2.5		0.9	0.0	2.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		14.2	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	10	419	16	10	483
Future Vol, veh/h	8	10	419	16	10	483
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	8	0	0	7
Mvmt Flow	13	16	665	25	16	767

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1477	678	0	0	690	0
Stage 1	678	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	270	530	-	-	914	-
Stage 1	687	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	262	530	-	-	914	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	364	914	-
HCM Lane V/C Ratio	-	-	0.078	0.017	-
HCM Control Delay (s)	-	-	15.7	9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	671	19	76	708	7	144
Future Vol, veh/h	671	19	76	708	7	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	11	7	17	3
Mvmt Flow	699	20	79	738	7	150

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	719	0	1605	709
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	896	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	842	-	152	468
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	458	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	842	-	138	468
Mov Cap-2 Maneuver	-	-	-	-	276	-
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	415	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	453	-	-	842	-
HCM Lane V/C Ratio	0.347	-	-	0.094	-
HCM Control Delay (s)	17.1	-	-	9.7	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0.3	-

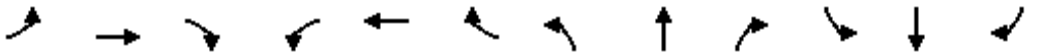
Intersection	
Int Delay, s/veh	22.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	142	196	234	72	2	85	1	142	2	1	0
Future Vol, veh/h	0	142	196	234	72	2	85	1	142	2	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	197	272	325	100	3	118	1	197	3	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	469	0	0	1085	1086	333	1184	1221	102
Stage 1	-	-	-	-	-	-	333	333	-	752	752	-
Stage 2	-	-	-	-	-	-	752	753	-	432	469	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1502	-	-	1062	-	-	236	278	712	191	208	964
Stage 1	-	-	-	-	-	-	711	697	-	441	458	-
Stage 2	-	-	-	-	-	-	458	497	-	636	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1502	-	-	1062	-	-	175	188	712	103	140	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	175	188	-	103	140	-
Stage 1	-	-	-	-	-	-	711	697	-	441	309	-
Stage 2	-	-	-	-	-	-	308	335	-	459	594	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.5	76.1	38.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	330	1502	-	-	1062	-	-	113
HCM Lane V/C Ratio	0.96	-	-	-	0.306	-	-	0.037
HCM Control Delay (s)	76.1	0	-	-	9.9	0	-	38.1
HCM Lane LOS	F	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	10.1	0	-	-	1.3	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	583	106	85	672	102	171	171	105	177	188	187
Future Volume (vph)	212	583	106	85	672	102	171	171	105	177	188	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.943			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1646	1766	1516	1752	1810	1568	1919	1724	0	1847	1756	0
Flt Permitted	0.103			0.178			0.253			0.252		
Satd. Flow (perm)	178	1766	1516	328	1810	1568	511	1724	0	489	1756	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		26			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	4%	3%	3%	5%	3%	5%	5%	4%	3%	6%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	601	109	88	693	105	176	284	0	182	387	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.9	39.2	53.5	41.1	34.7	49.1	24.5	15.8		24.7	15.9	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.52	0.26	0.17		0.26	0.17	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.96	0.81	0.12	0.35	1.03	0.12	0.66	0.91		0.71	1.16	
Control Delay	74.8	36.5	0.9	17.2	74.1	0.7	37.6	68.2		41.1	134.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	74.8	36.5	0.9	17.2	74.1	0.7	37.6	68.2		41.1	134.3	
LOS	E	D	A	B	E	A	D	E		D	F	
Approach Delay		41.3			59.7			56.5			104.5	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	80	302	0	23	~399	0	74	149		77	~258	
Queue Length 95th (ft)	#293	#599	8	66	#789	7	#140	265		#161	#425	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	229	740	941	289	671	903	271	312		261	333	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.96	0.81	0.12	0.30	1.03	0.12	0.65	0.91		0.70	1.16	

Intersection Summary

Area Type: Other

Cycle Length: 99

Actuated Cycle Length: 93.6

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 62.2 Intersection LOS: E

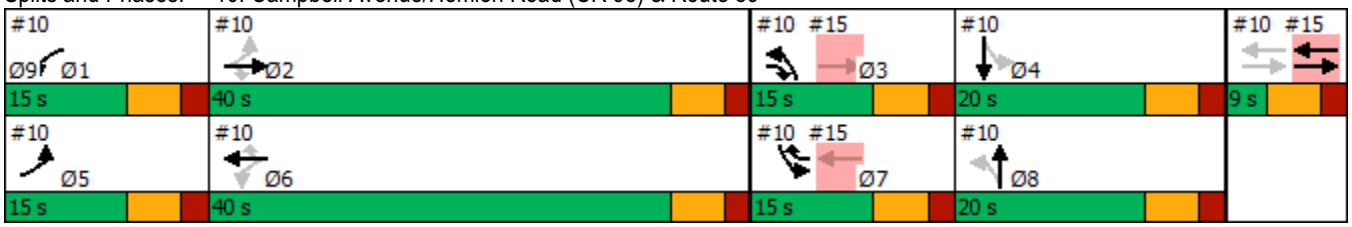
Intersection Capacity Utilization 97.9% ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

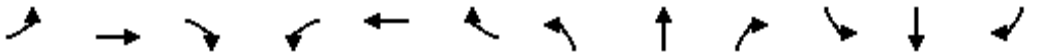
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	476	414	70	133	362	432	58	448	154	417	507	587
Future Volume (vph)	476	414	70	133	362	432	58	448	154	417	507	587
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1758	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1463
Flt Permitted	0.108			0.364			0.100			0.211		
Satd. Flow (perm)	200	1808	1424	700	1828	1398	171	3279	0	378	1739	1463
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					23				258
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	491	427	72	137	373	445	60	621	0	430	523	605
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	67.3	56.5	73.4	43.4	37.7	62.3	62.4	40.2		71.4	47.9	78.0
Actuated g/C Ratio	0.42	0.35	0.46	0.27	0.24	0.39	0.39	0.25		0.45	0.30	0.49

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.30	0.67	0.10	0.51	0.87	0.82	0.22	0.74		1.03	1.01	0.72
Control Delay	193.7	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.1	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.3	0.0
Total Delay	193.7	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.4	13.7
LOS	F	D	A	D	E	D	D	E		F	F	B
Approach Delay		116.3			51.4			59.3			66.8	
Approach LOS		F			D			E			E	
Queue Length 50th (ft)	~575	367	0	81	371	200	33	298		331	~599	151
Queue Length 95th (ft)	#947	404	12	156	342	#376	#116	428		#682	698	224
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	377	743	710	370	637	543	270	840		417	731	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	22	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.30	0.57	0.10	0.37	0.59	0.82	0.22	0.74		1.03	0.74	0.72

Intersection Summary

Area Type: Other

Cycle Length: 190

Actuated Cycle Length: 160.1

Natural Cycle: 140

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 73.8 Intersection LOS: E

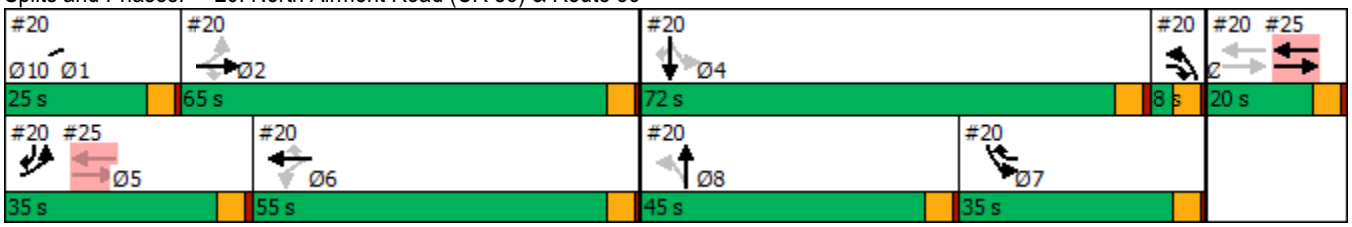
Intersection Capacity Utilization 111.0% ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

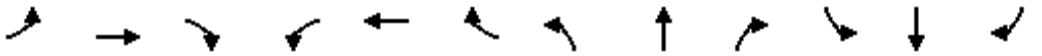
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

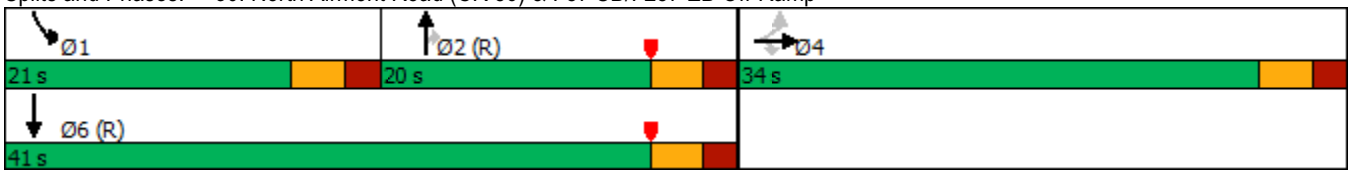


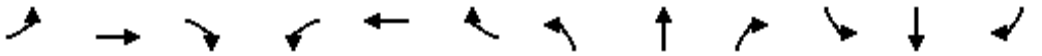
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	3	317	0	0	0	0	723	723	469	1213	0
Future Volume (vph)	278	3	317	0	0	0	0	723	723	469	1213	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1472	0	0	0	0	3183	1632	3485	3558	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1472	0	0	0	0	3183	1610	3482	3558	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						479			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	7%	0%	0%	0%	0%	8%	4%	3%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	320	0	0	0	0	730	730	474	1225	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		18.5	18.5					27.4	27.4	14.0	46.5	
Actuated g/C Ratio		0.25	0.25					0.37	0.37	0.19	0.62	
v/c Ratio		0.74	0.73					0.63	0.82	0.73	0.56	
Control Delay		37.3	26.5					18.6	14.3	30.3	3.7	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.3	26.5					18.6	14.3	30.3	3.9	
LOS		D	C					B	B	C	A	
Approach Delay		31.6						16.4			11.2	
Approach LOS		C						B			B	
Queue Length 50th (ft)		122	92					47	9	81	0	
Queue Length 95th (ft)		176	156					#279	#345	m138	m210	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	631					1163	892	743	2203	
Starvation Cap Reductn		0	0					0	0	0	224	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.47	0.51					0.63	0.82	0.64	0.62	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 86.3%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	3	317	0	0	0	0	723	723	469	1213	0
Future Volume (veh/h)	278	3	317	0	0	0	0	723	723	469	1213	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1649				0	1728	1859	2052	2037	0
Adj Flow Rate, veh/h	281	3	320				0	730	730	474	1225	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	7				0	8	4	3	4	0
Cap, veh/h	432	5	365				0	1258	603	590	2343	0
Arrive On Green	0.26	0.26	0.26				0.00	0.38	0.38	0.16	0.61	0.00
Sat Flow, veh/h	1652	18	1397				0	3370	1574	3791	3971	0
Grp Volume(v), veh/h	284	0	320				0	730	730	474	1225	0
Grp Sat Flow(s),veh/h/ln	1670	0	1397				0	1642	1574	1895	1935	0
Q Serve(g_s), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	13.7	0.0
Cycle Q Clear(g_c), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	13.7	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	436	0	365				0	1258	603	590	2343	0
V/C Ratio(X)	0.65	0.00	0.88				0.00	0.58	1.21	0.80	0.52	0.00
Avail Cap(c_a), veh/h	646	0	540				0	1258	603	809	2343	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.42	0.42	0.00
Uniform Delay (d), s/veh	24.7	0.0	26.5				0.0	18.4	23.1	30.5	8.5	0.0
Incr Delay (d2), s/veh	0.6	0.0	7.7				0.0	2.0	109.5	1.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	10.0				0.0	8.7	41.5	6.2	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	34.2				0.0	20.3	132.7	31.8	8.9	0.0
LnGrp LOS	C	A	C				A	C	F	C	A	A
Approach Vol, veh/h		604						1460			1699	
Approach Delay, s/veh		30.0						76.5			15.3	
Approach LOS		C						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.7	33.7		24.6		50.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	11.0	0.0		18.5		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

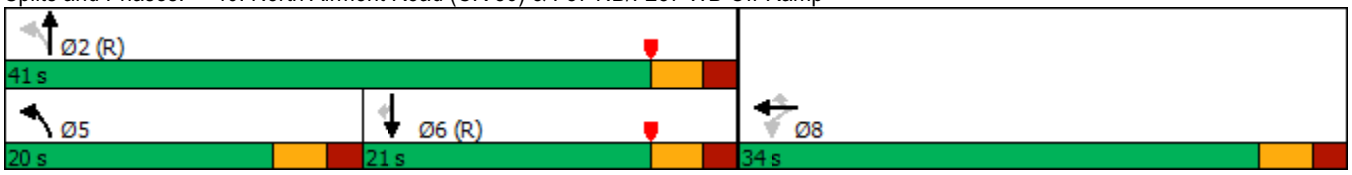
Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	812	2	462	391	610	0	0	870	427
Future Volume (vph)	0	0	0	812	2	462	391	610	0	0	870	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1665	1670	1583	1488	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.152					
Satd. Flow (perm)	0	0	0	1665	1670	1583	238	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						200						376
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	3%	3%	2%	12%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	414	417	471	399	622	0	0	888	436
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				23.7	23.7	23.7	41.3	41.3			21.3	21.3
Actuated g/C Ratio				0.32	0.32	0.32	0.55	0.55			0.28	0.28
v/c Ratio				0.79	0.79	0.74	1.05	0.37			0.87	0.63
Control Delay				34.1	34.3	19.7	72.6	3.9			43.9	19.5
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

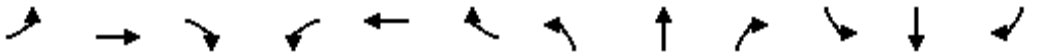
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.1	34.3	19.7	72.6	3.9			43.9	19.5
LOS				C	C	B	E	A			D	B
Approach Delay					28.9			30.8			35.9	
Approach LOS					C			C			D	
Queue Length 50th (ft)				177	178	107	~161	33			237	102
Queue Length 95th (ft)				261	263	195	#317	16			#393	m169
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				643	645	734	381	1687			1020	696
Starvation Cap Reductn				0	0	0	0	0			0	0
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.64	0.65	0.64	1.05	0.37			0.87	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 32.0		Intersection LOS: C	
Intersection Capacity Utilization 86.3%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	2	31	59	2	62	40	1248	68	67	1421	11
Future Volume (vph)	66	2	31	59	2	62	40	1248	68	67	1421	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.992			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1845	0	1589	3305	0	1718	3420	0
Flt Permitted		0.703			0.820		0.098			0.104		
Satd. Flow (perm)	0	1295	0	0	1549	0	164	3305	0	188	3420	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			66			9			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		4.1			10.5			4.2			3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	5%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	133	0	43	1431	0	73	1557	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		12.7			12.7		53.8	46.5		54.8	49.5	
Actuated g/C Ratio		0.17			0.17		0.72	0.62		0.73	0.66	
v/c Ratio		0.44			0.42		0.14	0.70		0.21	0.69	
Control Delay		26.0			18.7		4.8	16.3		8.0	11.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.0			18.7		4.8	16.3		8.0	11.8	
LOS		C			B		A	B		A	B	
Approach Delay		26.0			18.7			16.0			11.6	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		33			28		4	259		8	161	
Queue Length 95th (ft)		73			71		15	#463		m29	#490	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		367			461		328	2054		362	2256	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.29			0.29		0.13	0.70		0.20	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 14.3 Intersection LOS: B

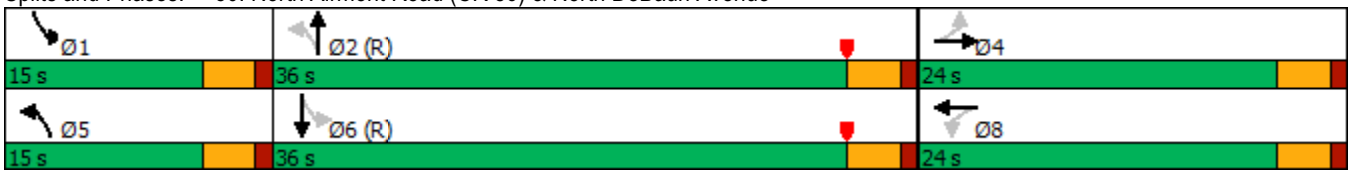
Intersection Capacity Utilization 66.3% ICU Level of Service C

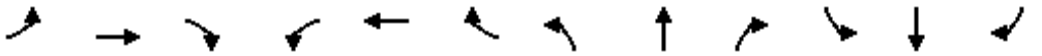
Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue

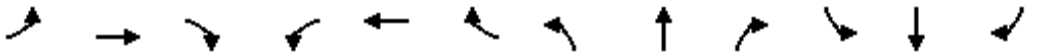




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	2	31	59	2	62	40	1248	68	67	1421	11
Future Volume (veh/h)	66	2	31	59	2	62	40	1248	68	67	1421	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1826	1900	2057	1997	2057
Adj Flow Rate, veh/h	72	2	34	64	2	67	43	1357	74	73	1545	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	5	0	0	4	0
Cap, veh/h	212	21	70	161	21	113	354	2019	110	437	2426	19
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.10	0.63	0.63
Sat Flow, veh/h	994	156	528	679	161	853	1725	3346	182	1959	3859	30
Grp Volume(v), veh/h	108	0	0	133	0	0	43	702	729	73	759	798
Grp Sat Flow(s),veh/h/ln	1678	0	0	1692	0	0	1725	1735	1793	1959	1897	1992
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	0.6	20.2	20.4	0.8	18.6	18.6
Cycle Q Clear(g_c), s	4.0	0.0	0.0	5.1	0.0	0.0	0.6	20.2	20.4	0.8	18.6	18.6
Prop In Lane	0.67		0.31	0.48		0.50	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	302	0	0	295	0	0	354	1047	1082	437	1193	1252
V/C Ratio(X)	0.36	0.00	0.00	0.45	0.00	0.00	0.12	0.67	0.67	0.17	0.64	0.64
Avail Cap(c_a), veh/h	502	0	0	505	0	0	471	1047	1082	520	1193	1252
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	30.4	0.0	0.0	6.0	9.9	9.9	6.7	8.6	8.6
Incr Delay (d2), s/veh	2.6	0.0	0.0	3.9	0.0	0.0	0.6	3.4	3.4	0.6	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	0.0	4.5	0.0	0.0	0.4	11.8	12.1	0.6	11.3	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	0.0	34.3	0.0	0.0	6.6	13.3	13.3	7.3	11.2	11.1
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	B	B
Approach Vol, veh/h		108			133			1474			1630	
Approach Delay, s/veh		32.5			34.3			13.1			11.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	49.3		13.9	9.9	51.1		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	22.4		6.0	2.6	20.6		7.1				
Green Ext Time (p_c), s	0.2	8.7		0.9	0.1	10.5		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		13.6	
HCM 6th LOS		B	

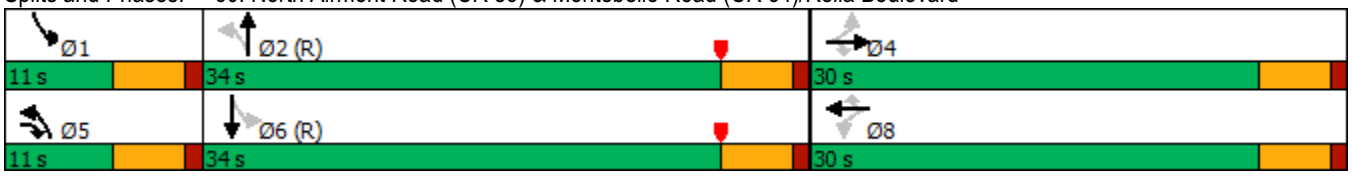


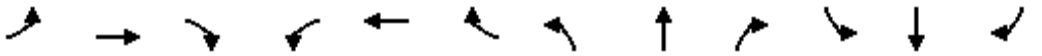
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	9	238	92	34	72	293	790	48	35	875	120
Future Volume (vph)	129	9	238	92	34	72	293	790	48	35	875	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.991			0.982	
Flt Protected		0.955		0.950			0.950			0.950		
Satd. Flow (prot)	0	1666	1433	1762	1723	1553	1710	3352	0	1745	3541	0
Flt Permitted		0.713		0.651			0.126			0.322		
Satd. Flow (perm)	0	1244	1433	1207	1723	1553	227	3352	0	592	3541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			44			102		10			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			781			587	
Travel Time (s)		15.5			12.2			17.8			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	145	251	97	36	76	308	883	0	37	1047	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		14.6	38.2	14.6	14.6	14.6	50.0	43.4		33.1	26.8	
Actuated g/C Ratio		0.19	0.51	0.19	0.19	0.19	0.67	0.58		0.44	0.36	
v/c Ratio		0.60	0.33	0.41	0.11	0.20	0.59	0.45		0.10	0.82	
Control Delay		37.2	11.1	30.6	23.5	4.2	18.2	13.1		7.1	27.1	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		37.2	11.1	30.6	23.5	4.2	18.2	13.1		7.1	27.1	
LOS		D	B	C	C	A	B	B		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		20.6			19.8			14.4			26.4	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)		63	54	40	14	0	48	170		5	216	
Queue Length 95th (ft)		108	106	75	34	20	#225	260		17	285	
Internal Link Dist (ft)		602			368			701			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		414	750	402	574	585	518	1941		361	1383	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.35	0.33	0.24	0.06	0.13	0.59	0.45		0.10	0.76	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 20.2		Intersection LOS: C	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	9	238	92	34	72	293	790	48	35	875	120
Future Volume (veh/h)	129	9	238	92	34	72	293	790	48	35	875	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	136	9	251	97	36	76	308	832	51	37	921	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	310	17	391	457	406	359	424	1839	113	515	1792	245
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.16	1.00	1.00	0.04	0.52	0.52
Sat Flow, veh/h	1096	88	1405	1583	2046	1810	1773	3251	199	1904	3435	470
Grp Volume(v), veh/h	145	0	251	97	36	76	308	435	448	37	521	526
Grp Sat Flow(s),veh/h/ln	1183	0	1405	1583	2046	1810	1773	1698	1752	1904	1944	1961
Q Serve(g_s), s	7.8	0.0	11.8	0.0	1.1	2.6	6.0	0.0	0.0	0.7	13.1	13.1
Cycle Q Clear(g_c), s	8.8	0.0	11.8	3.1	1.1	2.6	6.0	0.0	0.0	0.7	13.1	13.1
Prop In Lane	0.94		1.00	1.00		1.00	1.00		0.11	1.00		0.24
Lane Grp Cap(c), veh/h	328	0	391	457	406	359	424	961	991	515	1014	1023
V/C Ratio(X)	0.44	0.00	0.64	0.21	0.09	0.21	0.73	0.45	0.45	0.07	0.51	0.51
Avail Cap(c_a), veh/h	498	0	581	670	682	603	424	961	991	599	1014	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	23.8	25.3	24.5	25.2	10.7	0.0	0.0	7.5	11.7	11.7
Incr Delay (d2), s/veh	0.9	0.0	1.8	0.2	0.1	0.3	5.2	1.3	1.3	0.1	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	0.0	7.1	2.6	0.9	2.1	4.3	0.6	0.6	0.4	9.4	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	0.0	25.5	25.6	24.6	25.4	16.0	1.3	1.3	7.5	13.6	13.6
LnGrp LOS	C	A	C	C	C	C	B	A	A	A	B	B
Approach Vol, veh/h		396			209			1191			1084	
Approach Delay, s/veh		26.8			25.4			5.1			13.4	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	47.4		19.9	11.0	44.1		19.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.7	2.0		13.8	8.0	15.1		5.1				
Green Ext Time (p_c), s	0.0	3.3		1.1	0.0	3.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		12.7	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	18	474	9	5	505
Future Vol, veh/h	29	18	474	9	5	505
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	5	0	0	6
Mvmt Flow	35	22	571	11	6	608

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1197	577	0	0	582	0
Stage 1	577	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	353	591	-	-	1002	-
Stage 1	731	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	350	591	-	-	1002	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	706	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	415	1002	-
HCM Lane V/C Ratio	-	-	0.136	0.006	-
HCM Control Delay (s)	-	-	15	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	847	18	171	836	23	113
Future Vol, veh/h	847	18	171	836	23	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	7	6	4	0	7
Mvmt Flow	901	19	182	889	24	120

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	920	0	2164	911
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	1253	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	726	-	85	360
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	359	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	726	-	64	360
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	269	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	26.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	310	-	-	726	-
HCM Lane V/C Ratio	0.467	-	-	0.251	-
HCM Control Delay (s)	26.4	-	-	11.6	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.4	-	-	1	-

Intersection	
Int Delay, s/veh	40.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	78	173	257	151	6	163	8	206	3	5	3
Future Vol, veh/h	0	78	173	257	151	6	163	8	206	3	5	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	88	194	289	170	7	183	9	231	3	6	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	177	0	0	282	0	0	941	940	185	1057	1034	174
Stage 1	-	-	-	-	-	-	185	185	-	752	752	-
Stage 2	-	-	-	-	-	-	756	755	-	305	282	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1411	-	-	1252	-	-	297	327	865	230	237	883
Stage 1	-	-	-	-	-	-	846	782	-	441	420	-
Stage 2	-	-	-	-	-	-	470	496	-	733	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1411	-	-	1252	-	-	232	243	865	132	176	883
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	243	-	132	176	-
Stage 1	-	-	-	-	-	-	846	782	-	441	312	-
Stage 2	-	-	-	-	-	-	342	369	-	531	658	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.4	106.5	24
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	387	1411	-	-	1252	-	-	202
HCM Lane V/C Ratio	1.095	-	-	-	0.231	-	-	0.061
HCM Control Delay (s)	106.5	0	-	-	8.7	0	-	24
HCM Lane LOS	F	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	15.1	0	-	-	0.9	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	491	47	129	513	93	125	196	59	160	194	152
Future Volume (vph)	185	491	47	129	513	93	125	196	59	160	194	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.965			0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1749	1432	1752	1727	1252	1901	1739	0	1572	1769	0
Flt Permitted	0.115			0.116			0.151			0.321		
Satd. Flow (perm)	203	1749	1432	214	1727	1221	302	1739	0	530	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			138		13			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	5%	9%	3%	10%	29%	6%	5%	11%	21%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	599	57	157	626	113	152	311	0	195	422	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.8	35.7	49.2	43.2	35.4	43.4	35.2	26.7		36.3	27.3	
Actuated g/C Ratio	0.41	0.33	0.46	0.40	0.33	0.41	0.33	0.25		0.34	0.26	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.09	1.02	0.08	0.74	1.09	0.19	0.67	0.70		0.73	0.89	
Control Delay	114.5	79.8	0.2	43.8	100.4	2.9	37.7	43.9		41.8	56.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	114.5	79.8	0.2	43.8	100.4	2.9	37.7	43.9		41.8	56.8	
LOS	F	E	A	D	F	A	D	D		D	E	
Approach Delay		83.6			78.2			41.9			52.0	
Approach LOS		F			E			D			D	
Queue Length 50th (ft)	~120	~437	0	59	~479	0	63	176		85	246	
Queue Length 95th (ft)	#282	#580	0	#149	#657	15	108	262		140	354	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	208	585	742	218	573	581	237	568		269	592	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.09	1.02	0.08	0.72	1.09	0.19	0.64	0.55		0.72	0.71	

Intersection Summary

Area Type: Other

Cycle Length: 119

Actuated Cycle Length: 106.7

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 68.3 Intersection LOS: E

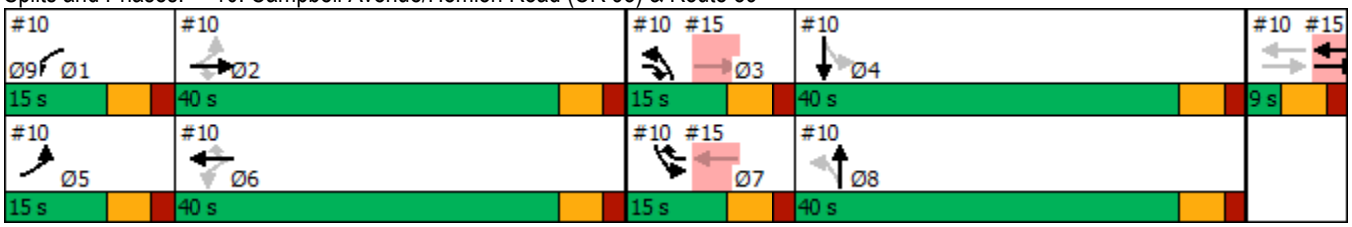
Intersection Capacity Utilization 83.7% ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

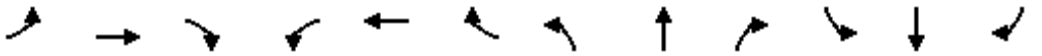
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	483	333	19	83	252	312	46	576	113	461	301	506
Future Volume (vph)	483	333	19	83	252	312	46	576	113	461	301	506
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1724	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1370
Flt Permitted	0.152			0.556			0.261			0.127		
Satd. Flow (perm)	276	1724	1168	1060	1761	1299	427	3343	0	221	1627	1370
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				416
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	6%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	493	340	19	85	257	318	47	703	0	470	307	516
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	56.5	48.8	81.9	29.7	27.0	51.5	73.0	40.1		61.5	31.4	61.5
Actuated g/C Ratio	0.38	0.33	0.55	0.20	0.18	0.34	0.49	0.27		0.41	0.21	0.41
v/c Ratio	1.24	0.60	0.03	0.34	0.81	0.71	0.09	0.78		1.24	0.90	0.64
Control Delay	167.9	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	7.3

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	167.9	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	7.3
LOS	F	D	A	D	E	D	C	E		F	F	A
Approach Delay		114.6			48.6			55.3			85.8	
Approach LOS		F			D			E			F	
Queue Length 50th (ft)	~510	270	0	49	238	129	22	322		~510	293	34
Queue Length 95th (ft)	#868	319	0	105	234	230	54	452		#793	409	99
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	396	760	685	395	658	447	501	906		380	732	809
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.24	0.45	0.03	0.22	0.39	0.71	0.09	0.78		1.24	0.42	0.64

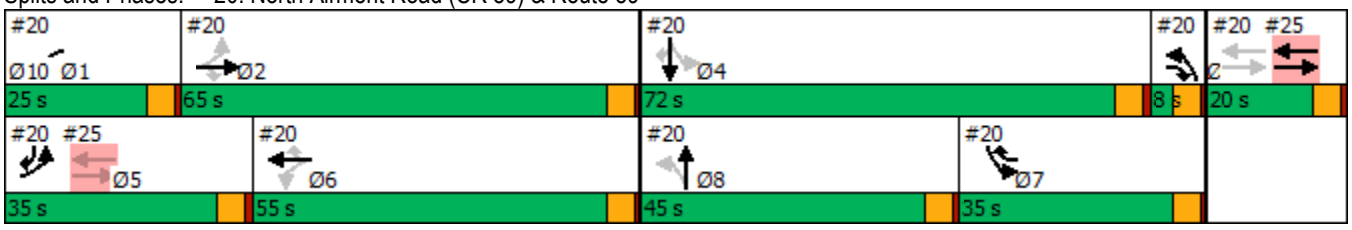
Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 149.3
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 79.4 Intersection LOS: E
Intersection Capacity Utilization 101.8% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

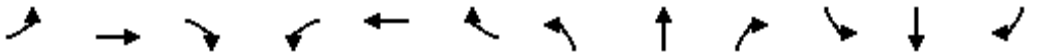
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

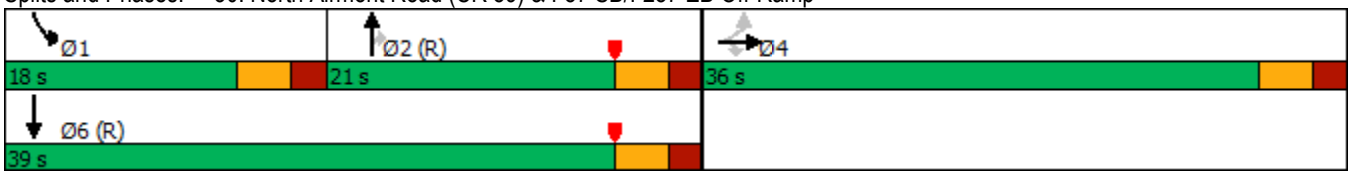


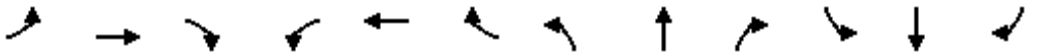
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	351	6	440	0	0	0	0	586	722	402	895	0
Future Volume (vph)	351	6	440	0	0	0	0	586	722	402	895	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1586	3519	3426	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1586	3519	3426	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						599			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	7%	2%	8%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	361	444	0	0	0	0	592	729	406	904	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		24.5	24.5					23.4	23.4	12.1	40.5	
Actuated g/C Ratio		0.33	0.33					0.31	0.31	0.16	0.54	
v/c Ratio		0.71	0.87					0.62	0.80	0.71	0.49	
Control Delay		29.2	35.3					23.1	16.7	33.9	9.6	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		29.2	35.3					23.1	16.7	33.9	9.6	
LOS		C	D					C	B	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		32.6						19.6			17.2	
Approach LOS		C						B			B	
Queue Length 50th (ft)		140	145					130	142	79	65	
Queue Length 95th (ft)		206	241					#229	#257	m112	m181	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					948	906	609	1850	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.56	0.72					0.62	0.80	0.67	0.49	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	6	440	0	0	0	0	586	722	402	895	0
Future Volume (veh/h)	351	6	440	0	0	0	0	586	722	402	895	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1813	2067	1977	0
Adj Flow Rate, veh/h	355	6	444				0	592	729	406	904	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	7	2	8	0
Cap, veh/h	543	9	477				0	917	448	522	1859	0
Arrive On Green	0.37	0.37	0.37				0.00	0.29	0.29	0.05	0.16	0.00
Sat Flow, veh/h	1462	25	1284				0	3226	1536	3818	3854	0
Grp Volume(v), veh/h	361	0	444				0	592	729	406	904	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1536	1909	1878	0
Q Serve(g_s), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	16.4	0.0
Cycle Q Clear(g_c), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	16.4	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	477				0	917	448	522	1859	0
V/C Ratio(X)	0.65	0.00	0.93				0.00	0.65	1.63	0.78	0.49	0.00
Avail Cap(c_a), veh/h	615	0	531				0	917	448	662	1859	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.55	0.55	0.00
Uniform Delay (d), s/veh	19.6	0.0	22.6				0.0	23.2	26.6	34.7	22.7	0.0
Incr Delay (d2), s/veh	1.5	0.0	21.0				0.0	3.5	292.3	1.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	0.0	14.8				0.0	8.4	68.9	6.4	11.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	43.6				0.0	26.7	318.9	36.6	23.2	0.0
LnGrp LOS	C	A	D				A	C	F	D	C	A
Approach Vol, veh/h		805						1321			1310	
Approach Delay, s/veh		33.5						187.9			27.3	
Approach LOS		C						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.3	26.9		32.9		42.1
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	9.9	0.0		26.9		0.0
Green Ext Time (p_c), s	0.4	0.0		1.0		0.0

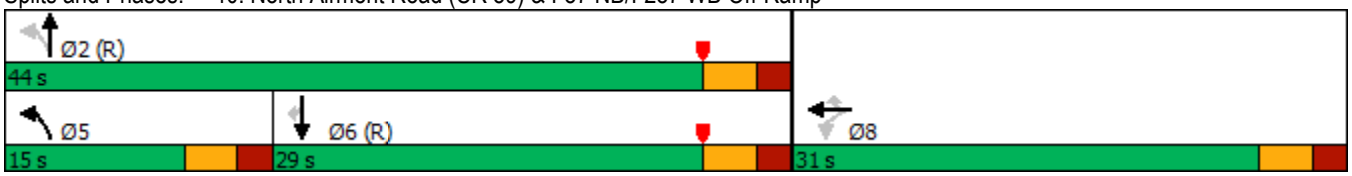
Intersection Summary	
HCM 6th Ctrl Delay	90.5
HCM 6th LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	651	1	321	287	650	0	0	646	293
Future Volume (vph)	0	0	0	651	1	321	287	650	0	0	646	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1559	1562	1553	1355	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.143					
Satd. Flow (perm)	0	0	0	1559	1562	1553	204	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						113						401
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	10%	0%	4%	23%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	446	447	440	393	890	0	0	885	401
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.1	24.1	24.1	40.9	40.9			25.9	25.9
Actuated g/C Ratio				0.32	0.32	0.32	0.55	0.55			0.35	0.35
v/c Ratio				0.89	0.89	0.77	1.49	0.55			0.71	0.51
Control Delay				46.1	46.1	26.4	257.3	11.7			27.1	9.0
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				46.1	46.1	26.4	257.3	11.7			27.1	9.0
LOS				D	D	C	F	B			C	A
Approach Delay					39.6			86.9			21.4	
Approach LOS					D			F			C	
Queue Length 50th (ft)				196	196	130	~229	150			154	9
Queue Length 95th (ft)				232	232	161	#290	152			224	68
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				540	541	612	264	1625			1253	780
Starvation Cap Reductn				0	0	0	0	0			0	0
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.83	0.83	0.72	1.49	0.55			0.71	0.51

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.49			
Intersection Signal Delay: 49.2		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	0	32	17	0	20	36	1325	10	22	1219	5
Future Volume (vph)	66	0	32	17	0	20	36	1325	10	22	1219	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.928			0.999			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1725	0	0	1676	0	1574	3290	0	1718	3231	0
Flt Permitted		0.774			0.880		0.135			0.126		
Satd. Flow (perm)	0	1379	0	0	1509	0	224	3290	0	228	3231	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		5.0			12.6			4.2			3.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	6%	0%	0%	10%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	109	0	0	41	0	40	1483	0	24	1360	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.5			11.5		56.7	53.5		55.9	50.7	
Actuated g/C Ratio		0.15			0.15		0.76	0.71		0.75	0.68	
v/c Ratio		0.40			0.14		0.11	0.63		0.07	0.62	
Control Delay		16.3			3.8		3.9	11.6		3.1	8.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.3			3.8		3.9	11.6		3.1	8.9	
LOS		B			A		A	B		A	A	
Approach Delay		16.3			3.8			11.4			8.8	
Approach LOS		B			A			B			A	
Queue Length 50th (ft)		15			0		4	121		2	174	
Queue Length 95th (ft)		55			11		13	#467		m6	230	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		421			455		368	2346		390	2183	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.26			0.09		0.11	0.63		0.06	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 10.3 Intersection LOS: B

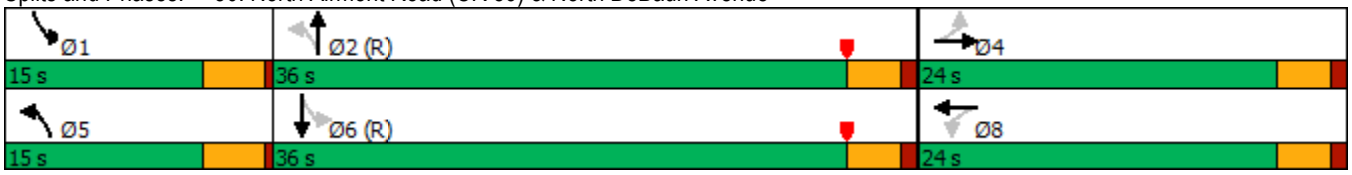
Intersection Capacity Utilization 52.1% ICU Level of Service A

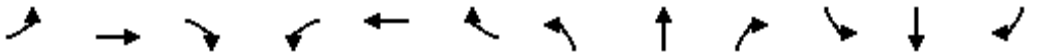
Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	0	32	17	0	20	36	1325	10	22	1219	5
Future Volume (veh/h)	66	0	32	17	0	20	36	1325	10	22	1219	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1811	1900	2057	1907	1682
Adj Flow Rate, veh/h	73	0	36	19	0	22	40	1472	11	24	1354	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	6	0	0	10	25
Cap, veh/h	199	16	67	147	24	117	389	2311	17	360	2357	10
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.66	0.66	0.05	0.64	0.64
Sat Flow, veh/h	934	128	524	601	192	918	1711	3501	26	1959	3700	16
Grp Volume(v), veh/h	109	0	0	41	0	0	40	723	760	24	663	697
Grp Sat Flow(s),veh/h/ln	1586	0	0	1712	0	0	1711	1721	1806	1959	1812	1904
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.5	18.5	18.5	0.3	15.7	15.7
Cycle Q Clear(g_c), s	4.6	0.0	0.0	1.5	0.0	0.0	0.5	18.5	18.5	0.3	15.7	15.7
Prop In Lane	0.67		0.33	0.46		0.54	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	282	0	0	288	0	0	389	1136	1192	360	1154	1213
V/C Ratio(X)	0.39	0.00	0.00	0.14	0.00	0.00	0.10	0.64	0.64	0.07	0.57	0.57
Avail Cap(c_a), veh/h	495	0	0	506	0	0	511	1136	1192	545	1154	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.2	0.0	0.0	5.0	7.5	7.5	5.7	7.8	7.8
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.8	0.0	0.0	0.4	2.7	2.6	0.3	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	0.0	0.0	1.3	0.0	0.0	0.3	10.1	10.5	0.2	9.4	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	0.0	0.0	30.0	0.0	0.0	5.4	10.2	10.1	5.9	9.9	9.8
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		109			41			1523			1384	
Approach Delay, s/veh		33.6			30.0			10.0			9.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	53.5		13.6	9.7	51.8		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	20.5		6.6	2.5	17.7		3.5				
Green Ext Time (p_c), s	0.0	10.5		0.9	0.1	12.3		0.3				

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	691	19	76	728	7	144
Future Vol, veh/h	691	19	76	728	7	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	6	11	10	17	3
Mvmt Flow	720	20	79	758	7	150

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	740	0	1646	730
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	916	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	827	-	145	456
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	450	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	827	-	131	456
Mov Cap-2 Maneuver	-	-	-	-	268	-
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	407	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	17.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	442	-	-	827	-
HCM Lane V/C Ratio	0.356	-	-	0.096	-
HCM Control Delay (s)	17.6	-	-	9.8	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.6	-	-	0.3	-

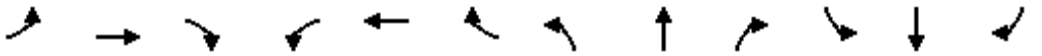
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	20	435	491	0
Future Vol, veh/h	0	20	20	435	491	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	100	100	7	7	0
Mvmt Flow	0	27	27	588	664	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1306	664	664	0	-	0
Stage 1	664	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Critical Hdwy	6.2	7.1	5.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	3.1	-	-	-
Pot Cap-1 Maneuver	192	332	595	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	179	332	595	-	-	-
Mov Cap-2 Maneuver	179	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	595	-	332	-	-
HCM Lane V/C Ratio	0.045	-	0.081	-	-
HCM Control Delay (s)	11.3	0	16.8	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	583	106	85	672	122	171	171	105	197	188	187
Future Volume (vph)	212	583	106	85	672	122	171	171	105	197	188	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.943			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1646	1766	1516	1752	1810	1357	1919	1724	0	1684	1756	0
Flt Permitted	0.103			0.176			0.253			0.247		
Satd. Flow (perm)	178	1766	1516	325	1810	1357	511	1724	0	437	1756	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		26			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	4%	3%	3%	5%	19%	5%	5%	4%	13%	6%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	601	109	88	693	126	176	284	0	203	387	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.9	39.2	53.4	41.1	34.7	49.3	24.5	15.8		25.2	16.1	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.53	0.26	0.17		0.27	0.17	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.96	0.81	0.12	0.36	1.04	0.16	0.67	0.91		0.86	1.15	
Control Delay	75.5	36.7	0.9	17.3	74.9	1.6	37.7	68.6		58.8	129.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	75.5	36.7	0.9	17.3	74.9	1.6	37.7	68.6		58.8	129.8	
LOS	E	D	A	B	E	A	D	E		E	F	
Approach Delay		41.6			59.1			56.8			105.4	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	80	302	0	23	~399	0	74	149		88	~258	
Queue Length 95th (ft)	#293	#599	8	66	#789	17	#140	265		#199	#425	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	228	738	939	287	669	790	271	312		237	336	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.96	0.81	0.12	0.31	1.04	0.16	0.65	0.91		0.86	1.15	

Intersection Summary

Area Type: Other

Cycle Length: 99

Actuated Cycle Length: 93.8

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 62.6 Intersection LOS: E

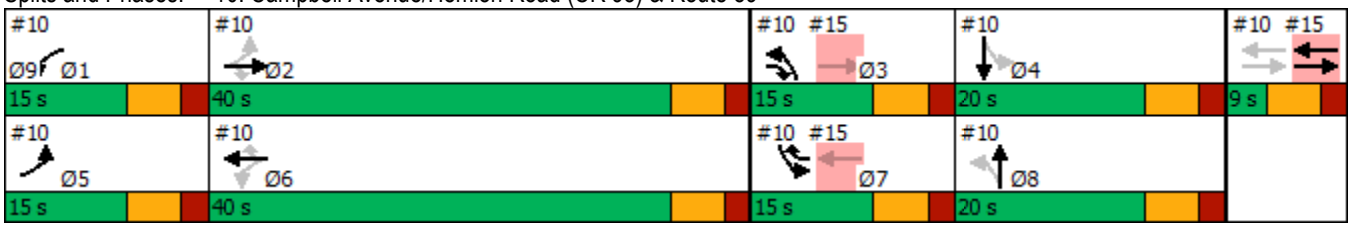
Intersection Capacity Utilization 97.9% ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

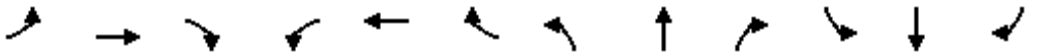
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	496	414	70	133	362	432	58	448	154	417	507	607
Future Volume (vph)	496	414	70	133	362	432	58	448	154	417	507	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1692	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1422
Flt Permitted	0.108			0.364			0.100			0.211		
Satd. Flow (perm)	192	1808	1424	700	1828	1398	171	3279	0	378	1739	1422
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					23				258
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	8%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	511	427	72	137	373	445	60	621	0	430	523	626
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	67.3	56.5	73.4	43.4	37.7	62.3	62.4	40.2		71.4	47.9	78.0
Actuated g/C Ratio	0.42	0.35	0.46	0.27	0.24	0.39	0.39	0.25		0.45	0.30	0.49

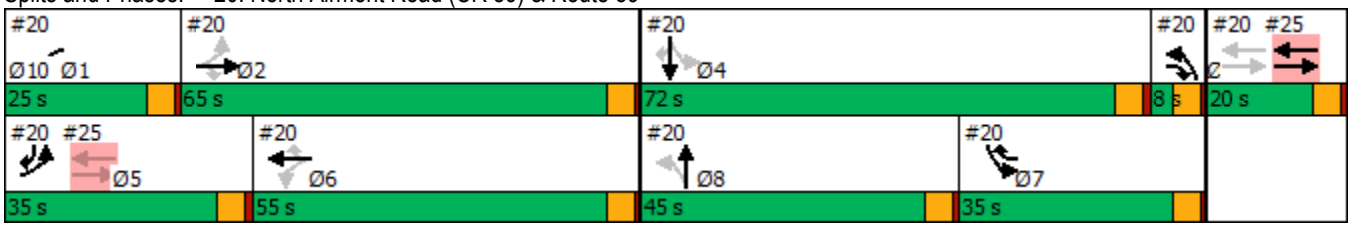
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.41	0.67	0.10	0.51	0.87	0.82	0.22	0.74		1.03	1.01	0.76
Control Delay	237.3	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.1	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.3	0.0
Total Delay	237.3	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.4	15.7
LOS	F	D	A	D	E	D	D	E		F	F	B
Approach Delay		139.9			51.4			59.3			66.8	
Approach LOS		F			D			E			E	
Queue Length 50th (ft)	~636	367	0	81	371	200	33	298		331	~599	168
Queue Length 95th (ft)	#1016	404	12	156	342	#376	#116	428		#682	698	250
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	362	743	710	370	637	543	270	840		417	731	825
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	22	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.41	0.57	0.10	0.37	0.59	0.82	0.22	0.74		1.03	0.74	0.76

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 160.1
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 79.6 Intersection LOS: E
Intersection Capacity Utilization 112.1% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

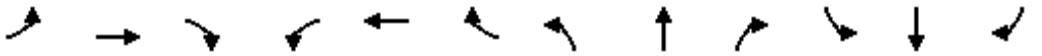
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

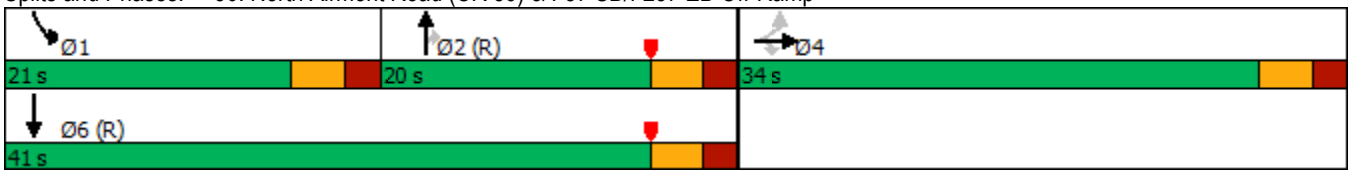


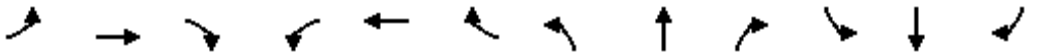
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	3	317	0	0	0	0	723	743	469	1233	0
Future Volume (vph)	278	3	317	0	0	0	0	723	743	469	1233	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1472	0	0	0	0	3183	1586	3485	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1472	0	0	0	0	3183	1564	3482	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						493			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	7%	0%	0%	0%	0%	8%	7%	3%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	320	0	0	0	0	730	751	474	1245	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		18.5	18.5					27.4	27.4	14.0	46.5	
Actuated g/C Ratio		0.25	0.25					0.37	0.37	0.19	0.62	
v/c Ratio		0.74	0.73					0.63	0.85	0.73	0.58	
Control Delay		37.3	26.5					18.7	16.4	30.0	3.8	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.3	26.5					18.7	16.4	30.0	3.9	
LOS		D	C					B	B	C	A	
Approach Delay		31.6						17.5			11.1	
Approach LOS		C						B			B	
Queue Length 50th (ft)		122	92					46	13	78	0	
Queue Length 95th (ft)		176	156					#278	#361	m136	m211	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	631					1163	884	743	2162	
Starvation Cap Reductn		0	0					0	0	0	194	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.47	0.51					0.63	0.85	0.64	0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 118.6%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp

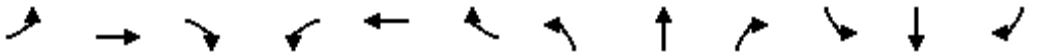




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	3	317	0	0	0	0	723	743	469	1233	0
Future Volume (veh/h)	278	3	317	0	0	0	0	723	743	469	1233	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1649				0	1728	1813	2052	2007	0
Adj Flow Rate, veh/h	281	3	320				0	730	751	474	1245	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	7				0	8	7	3	6	0
Cap, veh/h	432	5	365				0	1258	588	590	2308	0
Arrive On Green	0.26	0.26	0.26				0.00	0.38	0.38	0.16	0.61	0.00
Sat Flow, veh/h	1652	18	1397				0	3370	1535	3791	3913	0
Grp Volume(v), veh/h	284	0	320				0	730	751	474	1245	0
Grp Sat Flow(s),veh/h/ln	1670	0	1397				0	1642	1535	1895	1906	0
Q Serve(g_s), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	14.3	0.0
Cycle Q Clear(g_c), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	14.3	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	436	0	365				0	1258	588	590	2308	0
V/C Ratio(X)	0.65	0.00	0.88				0.00	0.58	1.28	0.80	0.54	0.00
Avail Cap(c_a), veh/h	646	0	540				0	1258	588	809	2308	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.38	0.38	0.00
Uniform Delay (d), s/veh	24.7	0.0	26.5				0.0	18.4	23.1	30.5	8.7	0.0
Incr Delay (d2), s/veh	0.6	0.0	7.7				0.0	2.0	137.5	1.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	10.0				0.0	8.7	47.9	6.1	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	34.2				0.0	20.3	160.6	31.7	9.0	0.0
LnGrp LOS	C	A	C				A	C	F	C	A	A
Approach Vol, veh/h		604						1481			1719	
Approach Delay, s/veh		30.0						91.4			15.3	
Approach LOS		C						F			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.7	33.7		24.6		50.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	11.0	0.0		18.5		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

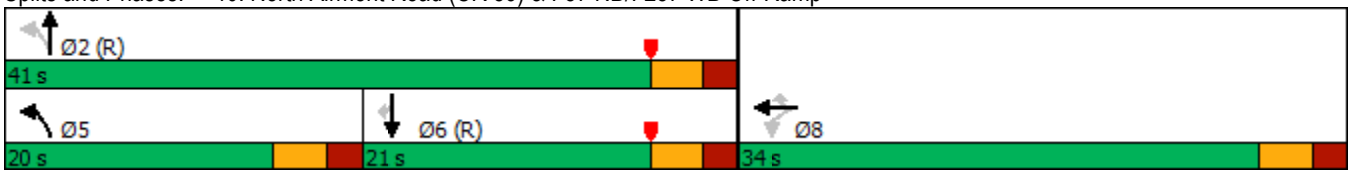


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	832	2	462	391	610	0	0	870	427
Future Volume (vph)	0	0	0	832	2	462	391	610	0	0	870	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1633	1638	1583	1488	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.155					
Satd. Flow (perm)	0	0	0	1633	1638	1583	243	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						200						376
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	5%	3%	2%	12%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	424	427	471	399	622	0	0	888	436
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.2	24.2	24.2	40.8	40.8			20.8	20.8
Actuated g/C Ratio				0.32	0.32	0.32	0.54	0.54			0.28	0.28
v/c Ratio				0.80	0.81	0.73	1.05	0.37			0.89	0.63
Control Delay				34.9	35.1	19.0	72.7	4.2			46.2	19.8
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.9	35.1	19.0	72.7	4.2			46.2	19.8
LOS				C	D	B	E	A			D	B
Approach Delay					29.3			31.0			37.5	
Approach LOS					C			C			D	
Queue Length 50th (ft)				182	183	105	~162	46			237	102
Queue Length 95th (ft)				272	274	195	#315	16			#393	m169
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				631	633	734	381	1664			994	689
Starvation Cap Reductn				0	0	0	0	0			0	0
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.67	0.67	0.64	1.05	0.37			0.89	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 32.7		Intersection LOS: C	
Intersection Capacity Utilization 118.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	2	31	59	2	62	40	1268	68	67	1441	11
Future Volume (vph)	66	2	31	59	2	62	40	1268	68	67	1441	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.992			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1845	0	1589	3275	0	1718	3388	0
Flt Permitted		0.703			0.820		0.093			0.099		
Satd. Flow (perm)	0	1295	0	0	1549	0	156	3275	0	179	3388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			66			9			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		4.1			10.5			4.2			3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	6%	0%	0%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	133	0	43	1452	0	73	1578	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		12.7			12.7		53.8	46.5		54.8	49.5	
Actuated g/C Ratio		0.17			0.17		0.72	0.62		0.73	0.66	
v/c Ratio		0.44			0.42		0.14	0.71		0.22	0.71	
Control Delay		26.0			18.7		4.8	16.9		8.3	12.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.0			18.7		4.8	16.9		8.3	12.6	
LOS		C			B		A	B		A	B	
Approach Delay		26.0			18.7			16.5			12.4	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		33			28		4	267		8	167	
Queue Length 95th (ft)		73			71		15	#478		m29	#506	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		367			461		323	2035		357	2235	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.29			0.29		0.13	0.71		0.20	0.71	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 14.9 Intersection LOS: B

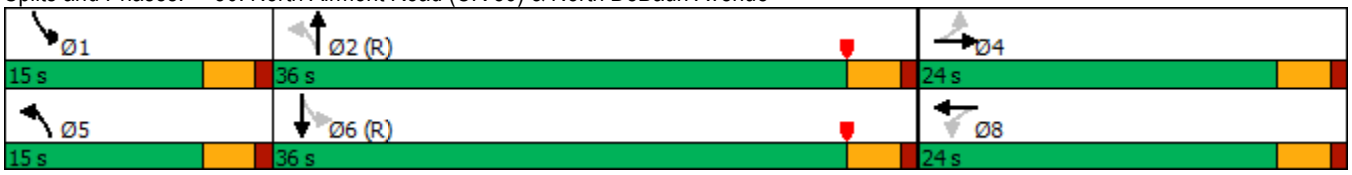
Intersection Capacity Utilization 66.8% ICU Level of Service C

Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	2	31	59	2	62	40	1268	68	67	1441	11
Future Volume (veh/h)	66	2	31	59	2	62	40	1268	68	67	1441	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1811	1900	2057	1982	2057
Adj Flow Rate, veh/h	72	2	34	64	2	67	43	1378	74	73	1566	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	6	0	0	5	0
Cap, veh/h	212	21	70	161	21	113	349	2004	107	430	2408	18
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.10	0.63	0.63
Sat Flow, veh/h	994	156	528	679	161	853	1725	3322	178	1959	3831	29
Grp Volume(v), veh/h	108	0	0	133	0	0	43	712	740	73	769	809
Grp Sat Flow(s),veh/h/ln	1678	0	0	1692	0	0	1725	1721	1779	1959	1883	1977
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	0.6	21.0	21.2	0.8	19.2	19.3
Cycle Q Clear(g_c), s	4.0	0.0	0.0	5.1	0.0	0.0	0.6	21.0	21.2	0.8	19.2	19.3
Prop In Lane	0.67		0.31	0.48		0.50	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	302	0	0	295	0	0	349	1038	1073	430	1184	1243
V/C Ratio(X)	0.36	0.00	0.00	0.45	0.00	0.00	0.12	0.69	0.69	0.17	0.65	0.65
Avail Cap(c_a), veh/h	502	0	0	505	0	0	466	1038	1073	513	1184	1243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	30.4	0.0	0.0	6.2	10.1	10.1	7.0	8.7	8.8
Incr Delay (d2), s/veh	2.6	0.0	0.0	3.9	0.0	0.0	0.6	3.7	3.6	0.7	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	0.0	4.5	0.0	0.0	0.4	12.1	12.5	0.6	11.6	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	0.0	34.3	0.0	0.0	6.8	13.8	13.7	7.7	11.5	11.4
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	B	B
Approach Vol, veh/h		108			133			1495			1651	
Approach Delay, s/veh		32.5			34.3			13.5			11.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	49.3		13.9	9.9	51.1		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	23.2		6.0	2.6	21.3		7.1				
Green Ext Time (p_c), s	0.2	8.1		0.9	0.1	10.0		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		13.9	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	867	18	171	856	23	113
Future Vol, veh/h	867	18	171	856	23	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	7	6	6	0	7
Mvmt Flow	922	19	182	911	24	120

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	941	0	2207	932
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	1275	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	712	-	81	351
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	712	-	60	351
Mov Cap-2 Maneuver	-	-	-	-	179	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	262	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	27.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	302	-	-	712	-
HCM Lane V/C Ratio	0.479	-	-	0.255	-
HCM Control Delay (s)	27.4	-	-	11.8	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.5	-	-	1	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	20	483	534	0
Future Vol, veh/h	0	20	20	483	534	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	100	100	5	6	0
Mvmt Flow	0	23	23	555	614	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1215	614	614	0	-	0
Stage 1	614	-	-	-	-	-
Stage 2	601	-	-	-	-	-
Critical Hdwy	6.2	7.1	5.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	3.1	-	-	-
Pot Cap-1 Maneuver	216	358	627	-	-	-
Stage 1	563	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	205	358	627	-	-	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	570	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.7	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	627	-	358	-	-
HCM Lane V/C Ratio	0.037	-	0.064	-	-
HCM Control Delay (s)	11	0	15.7	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

PAVEMENT MARKING LEGEND

UNLESS OTHERWISE SHOWN, PAVEMENT MARKINGS SHALL CONFORM TO THE FOLLOWING:

MARKING TYPE	WIDTH OF MARKING
STOP LINE	– 24" WHITE LINE
CENTER LINE	– TWO–4" YELLOW LINES (SEE NOTE 8)
BROKEN LANE LINE	– 4" WHITE LINES, 10' LONG WITH 30' GAP
DOTTED LANE LINE (LANE EXTENSION) – WIDE	– 8" WHITE LINES, 2' LONG WITH 6' GAP
DOTTED LANE LINE (LANE EXTENSION) – NORMAL	– 4" WHITE LINES, 2' LONG WITH 6' GAP
DOTTED LANE LINE (LANE ADD/DROP) – WIDE	– 8" WHITE LINES, 3' LONG WITH 9' GAP
DOTTED LANE LINE (LANE ADD/DROP) – NORMAL	– 4" WHITE LINES, 3' LONG WITH 9' GAP
SOLID LANE LINE – WIDE	– 8" WHITE LINES
SOLID LANE LINE – NORMAL	– 4" WHITE LINES
CROSSWALK LINES	– 8" WHITE LINES
MEDIAN CROSS HATCH LINES	– 24" YELLOW LINES AT 45° SPACED 12' O.C. (24"Y @ 12' O.C.)
GORE CROSS HATCH LINES	– 24" WHITE LINES AT 45° SPACED 12' O.C. (24"W @ 12' O.C.)
ISLAND CHANNELIZATION LINE	– 8" WHITE LINES
RIGHT SHOULDER LINE	– 4" WHITE LINES
LEFT SHOULDER LINE	– 4" YELLOW LINES

TYPICAL ABBREVIATION:

XX"/W

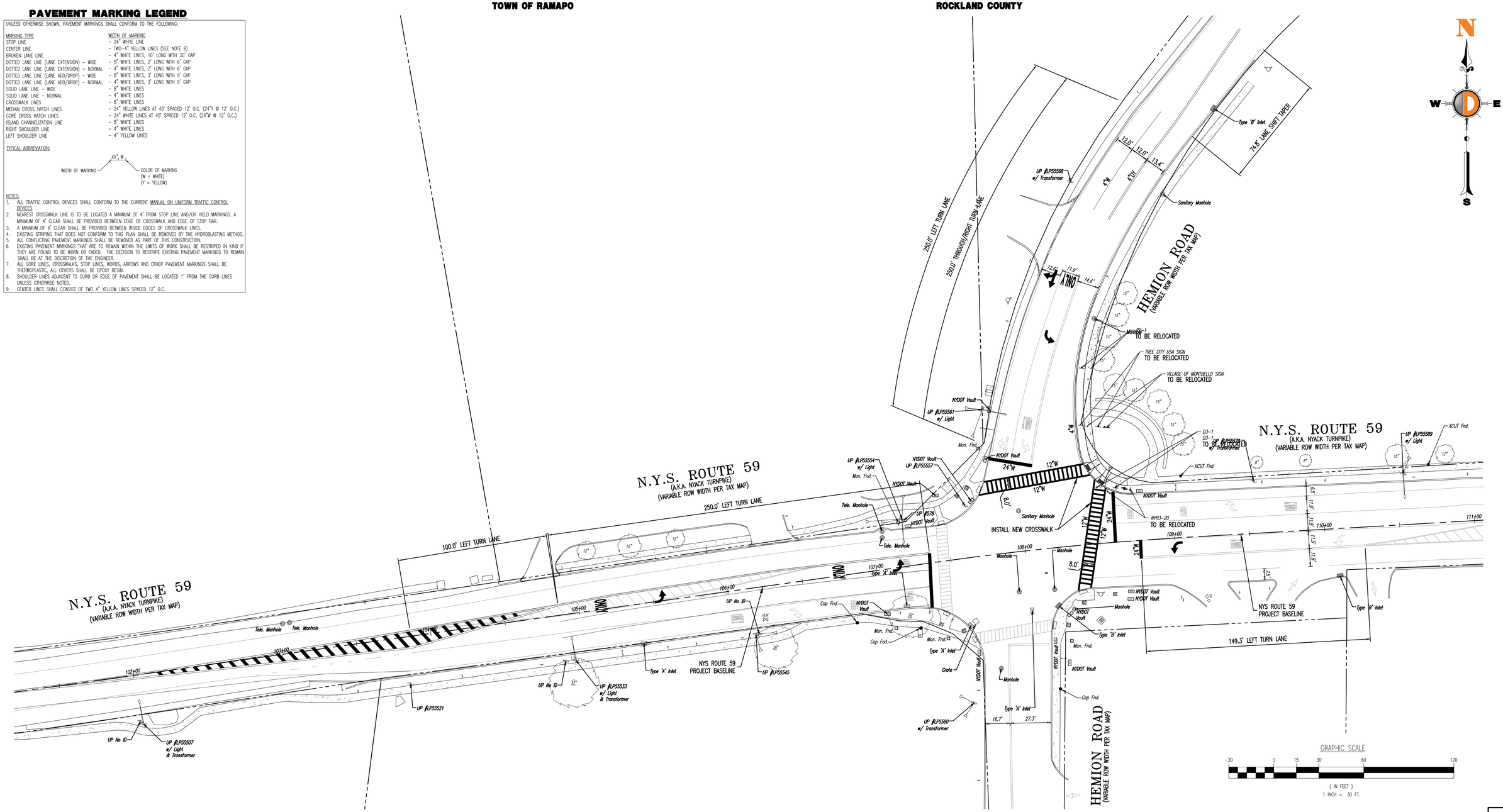
WIDTH OF MARKING — COLOR OF MARKING (W = WHITE) (Y = YELLOW)

NOTES:

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. NEAREST CROSSWALK LINE IS TO BE LOCATED A MINIMUM OF 4' FROM STOP LINE AND/OR YIELD MARKINGS. A MINIMUM OF 4' CLEAR SHALL BE PROVIDED BETWEEN EDGE OF CROSSWALK AND EDGE OF STOP BAR.
3. A MINIMUM OF 6' CLEAR SHALL BE PROVIDED BETWEEN INSIDE EDGES OF CROSSWALK LINES.
4. EXISTING STRIPING THAT DOES NOT CONFORM TO THIS PLAN SHALL BE REMOVED BY THE HYDROBLASTING METHOD.
5. ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED AS PART OF THIS CONSTRUCTION.
6. EXISTING PAVEMENT MARKINGS THAT ARE TO REMAIN WITHIN THE LIMITS OF WORK SHALL BE RESTRIPED IN KIND IF THEY ARE FOUND TO BE WORN OR FADED. THE DECISION TO RESTRIPE EXISTING PAVEMENT MARKINGS TO REMAIN SHALL BE AT THE DISCRETION OF THE ENGINEER.
7. ALL GORE LINES, CROSSWALKS, STOP LINES, WORDS, ARROWS AND OTHER PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, ALL OTHERS SHALL BE EPOXY RESIN.
8. SHOULDER LINES ADJACENT TO CURB OR EDGE OF PAVEMENT SHALL BE LOCATED 1' FROM THE CURB LINES UNLESS OTHERWISE NOTED.
9. CENTER LINES SHALL CONSIST OF TWO 4" YELLOW LINES SPACED 12" O.C.

TOWN OF RAMAPO

ROCKLAND COUNTY



SS–1
SS–2

SIGN LEGEND

EXISTING (TO REMAIN) SIGN LEGEND	
MUTCD DESIGNATION	DESCRIPTION
R12–1	WEIGHT LIMIT (18 TONS)
M1–1	I–287 INTERSTATE SIGN
M1–6	COUNTY ROUTE SIGN (35A ROCKLAND COUNTY)

NOTES:

1. ALL SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH THE MUTCD.
2. TRAFFIC SIGN SUPPORTS SHALL BE TYPE "A" AND FROM THE STATE APPROVED LIST.
3. THE REMOVAL OF EXISTING PAVEMENT MARKINGS WILL BE UNDER THE FOLLOWING ITEMS:
   635.0103 – CLEANING AND PREPARATION OF PAVEMENT SURFACE LINES (LF)
   635.0203 – CLEANING AND PREPARATION OF PAVEMENT SURFACE LETTERS (EA)
   635.0303 – CLEANING AND PREPARATION OF PAVEMENT SURFACE SYMBOLS (EA)
4. ALL NEW PAVEMENT MARKINGS SHALL BE THE FOLLOWING ITEMS:
   685.11 – WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES, 20 MILS
   685.12 – YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES, 20 MILS
5. ALL STOP LINES, LEGENDS AND SYMBOLS SHOULD BE PREFORMED TAPE USING ITEMS:
   685.11 – WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES (LF), 20 MILS
   685.13 – WHITE EPOXY REFLECTORIZED PAVEMENT LETTERS (EA), 20 MILS
   685.14 – WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS (EA), 20 MILS
6. SEE STRIPING DETAILS ON THIS SHEET.
7. ALL RELOCATED SIGNS PER ITEM 647.11

REV	DATE	COMMENTS	BY

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SIGNING & STRIPING PLANS
INTERSECTION IMPROVEMENT PLANS
N.Y.S ROUTE 59 AND HEMION ROAD/AIRMONT ROAD
TOWN OF RAMAPO, ROCKLAND COUNTY, NEW YORK

SCALE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
1"=30'	MJN	MJN	KMS

PROJECT NUMBER:	DATE:	REV. #:
3709–99–004T	XX/XX/XXXX	0

SHEET NUMBER: 9 OF 13

Plotted: 04/19/22 – 2:51 PM, By: mnowelski, – Product Ver: 24.1s (LMS Tech)
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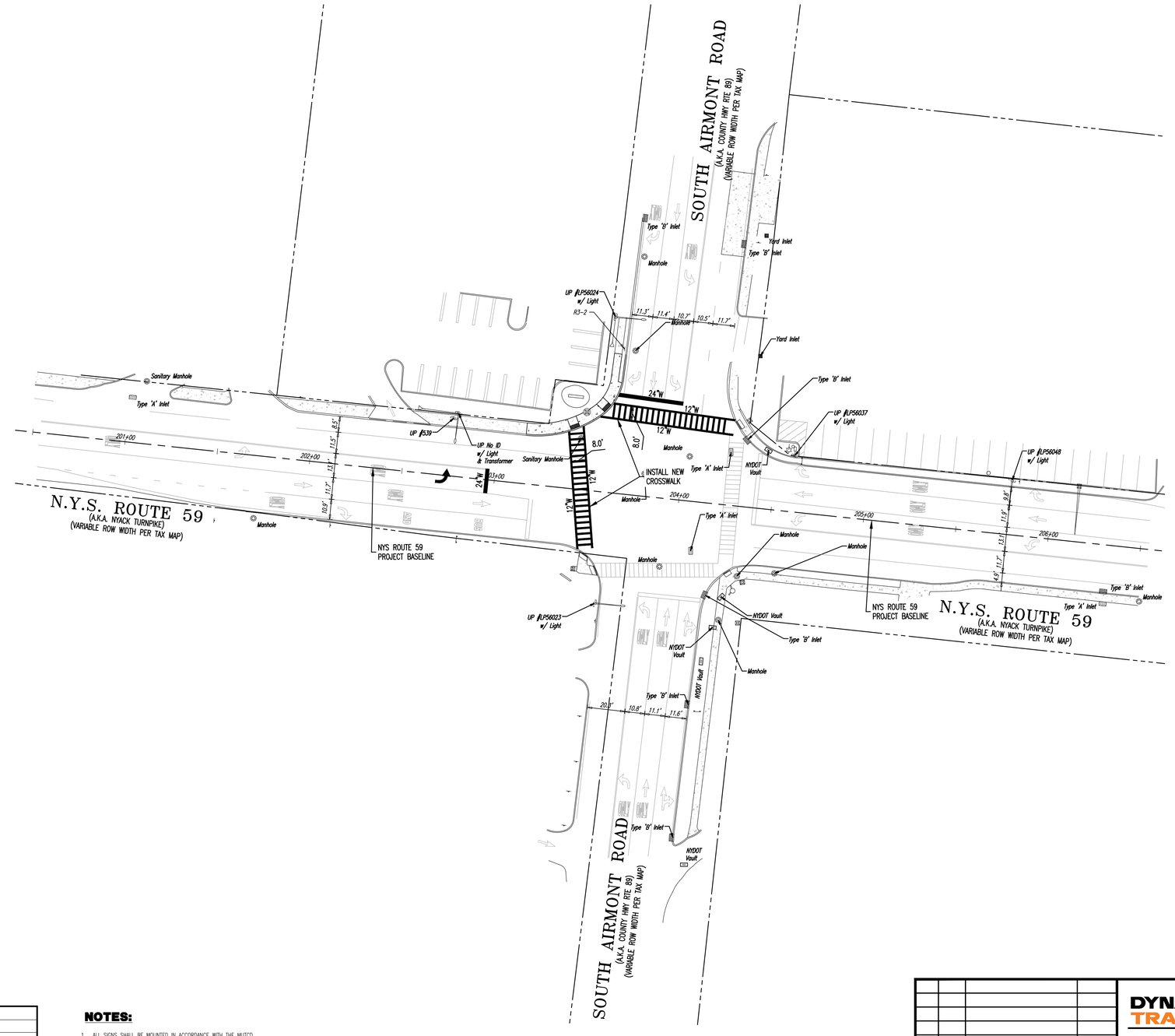
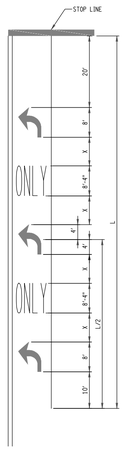
TOWN OF RAMAPO

ROCKLAND COUNTY





LANE USE ARROW PLACEMENT
200' < L ≤ 400'

SYMBOL SPACING NOTES:

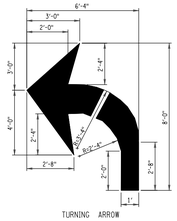
S1. SPACING BETWEEN ARROWS AND "ONLY" (X) IS 32' MIN. AND 80' MAX. LOWER SPEED ROADS SHOULD HAVE CLOSER SPACING THAN HIGHER SPEED ROADS.

S2. IF L < 75' OR L > 400', REFER TO CONTRACT DOCUMENTS OR REGIONAL TRAFFIC SAFETY AND MOBILITY GROUP FOR GUIDANCE ON SPACING OF ARROWS AND "ONLY".

S3. ON AN UNCONTROLLED APPROACH (NO STOP SIGN, YIELD SIGN, OR TRAFFIC SIGNAL) OMIT STOP LINE.

S4. IF INTERSECTION LANE CONTROL SIGNS (EG. R3-5) ARE NOT PROVIDED FOR THE LANE, THE "ONLY" MARKINGS SHALL BE DELETED.

S5. ARROWS AND "ONLY" TO BE CENTERED IN THE LANE.



TURNING ARROW
(PAID AS ONE SYMBOL)

SIGN LEGEND

EXISTING (TO REMAIN) SIGN LEGEND	
MUTCD DESIGNATION	DESCRIPTION
R12-1	WEIGHT LIMIT (18 TONS)
M1-1	I-287 INTERSTATE SIGN
M1-6	COUNTY ROUTE SIGN (35A ROCKLAND COUNTY)
M3-1	NORTH
M3-3	SOUTH
M3-4	WEST
M4-5	TO
M5-1	TURN ARROW (RIGHT/LEFT)
M6-3	DIRECTIONAL ARROW (STRAIGHT)
OM4-3	OBJECT MARKER
W16-9	AHEAD PLAQUE

NOTES:

1. ALL SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH THE MUTCD.
2. TRAFFIC SIGN SUPPORTS SHALL BE TYPE "A" AND FROM THE STATE APPROVED LIST.
3. THE REMOVAL OF EXISTING PAVEMENT MARKINGS WILL BE UNDER THE FOLLOWING ITEMS:
   - 635.0103 – CLEANING AND PREPARATION OF PAVEMENT SURFACE LINES (LF)
   - 635.0203 – CLEANING AND PREPARATION OF PAVEMENT SURFACE LETTERS (EA)
   - 635.0303 – CLEANING AND PREPARATION OF PAVEMENT SURFACE SYMBOLS (EA)
4. ALL NEW PAVEMENT MARKINGS SHALL BE THE FOLLOWING ITEMS:
   - 685.11 – WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES, 20 MILS
5. ALL STOP LINES, LEGENDS AND SYMBOLS SHOULD BE PREFORMED TAPE USING ITEMS:
   - 685.11 – WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES (LF), 20 MILS
   - 685.13 – WHITE EPOXY REFLECTORIZED PAVEMENT LETTERS (EA), 20 MILS
   - 685.14 – WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS (EA), 20 MILS
6. SEE STRIPING DETAILS ON THIS SHEET.
7. ALL RELOCATED SIGNS PER ITEM 647.11

GRAPHIC SCALE

−30 0 15 30 60 120

(IN FEET)
1 INCH = 30 FT.

SS-2
SS-2

REV	DATE	COMMENTS	BY

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SCALE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
1"=30'	MJN	MJN	KMS

PROJECT NUMBER:	DATE:	REV. #:
3709-99-0047	XX/XX/XXXX	0

SHEET NUMBER: 10 OF 13

Plotted: 04/19/22 – 2:51 PM, By: mnowelski – Product Ver: 24.1s (LMS Tech)
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